

Imperial Hunting Grounds: A New Reading of Mughal Cultural History

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Parpia, Shaha. 2016. 'Mughal Hunting Grounds: Landscape Manipulation and "Garden" Association', *Garden History: Journal of the Gardens Trust* 44/2,171-190.

Parpia, Shaha. 2018a. 'Reordering Nature: Power Politics in the Mughal Shikargah', *International Journal of Islamic Architecture*, 7/1, 39-66.

Parpia, Shaha. 2018b. 'Hunting Ground, Agricultural Land and the Forest: Sustainable Interdependency in Mughal India 1526-1707', *Landscape History* 39/2, 23-42.

Parpia, Shaha. 2019. 'The Imperial Mughal Hunt: A Pursuit of Knowledge', in *'Ilm: Science, Religion, and Art in Islam*, Samer Akkach (ed.), Adelaide: University of Adelaide Press, 39-58.

Parpia, Shaha. 'The Artist's Gaze: Visual Representations of the Mughal Hunting Landscape' in *Nazar: Ways of Seeing in Islamic Cultures and Beyond*, Samer Akkach (ed.), forthcoming.

ABSTRACT

This study is an exposé of the imperial hunt, considered one of the most enduring institutions of the Mughal dynasty (1526-1858). It presents a new understanding of the hunting culture and the *shikargah* (hunting ground). A critical examination of the ways in which the *shikargah* was perceived and utilised, both real and allegorical, during the reign of the first six emperors, the Great Mughals (1526-1707), enables a rethinking of the common narrative that the *shikargah* was ‘wilderness’, an untamed, amorphous space filled with game for the chase. As the series of above studies show, the *shikargah* was rather a sophisticated, purpose-designed, ecologically modified landscape meant to reflect the multi-dimensional Mughal hunting culture, itself seen as an extension of prevailing socio-political and cultural world views. The vast enterprise of the hunting expedition, which involved the movement and encampment of entire courts and armies in *shikargahs* as well as the hunting palaces enroute, served a number of political purposes with the intent to project kingship and good governance. Using the framework of the hunt to interpret related landscapes, such as the garden, agricultural lands, and forests, these studies also appraise the complex human-animal-environment nexus and find a sustainable spatial, cultural, and political interdependency between their related spaces and habitats, thus highlighting the role of the hunting culture in supporting both the economy and the ecology. The implications of the *shikargah*’s utility, viewed as an ‘intellectual space’, also addresses the relationship between science, religion, ethics, and spirituality. The study also finds that visual depictions of the imperial hunt and the *shikargah* are cloaked in layers of meanings and ideological concerns. The Mughal artist’s use of artistic tools, viewing choices and hermeneutics are intended to reflect the cultural, political and spiritual views of the rulers, thus providing another useful tool with which to view the Mughal world. The new reading thus highlights the importance of the imperial hunt and the *shikargah* as essential analytical components for future Mughal historical and landscape studies.

DECLARATION

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

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SHAHA ALTAF PARPIA

Dated 20/12/2018

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INTRODUCTORY STUDIES

1. AIMS, SIGNIFICANCE AND METHOD

Aims and Significance

Throughout the annals of history man has hunted. Steeped in mythology, the hunt became one of the main components through which empires and civilisations, kingship and sovereignty, could be articulated and represented. The imperial hunt was a significant element in the political cultures of the broad Persianate world, India and Central Asia. The Mughals, who ruled over large swathes of the Indian subcontinent from 1526 to 1858, valued the hunting institution as an enduring and intrinsic aspect of their imperial society. The Great Mughals (collectively *r.* 1526-1707) were dedicated hunters and perceived the hunting apparatus as a royal prerogative and a means to exercise authority over nature and their subjects. The Mughals, whether stationed in one of their capital cities or on extended tours, hunted on a regular basis using a variety of hunting techniques. Although they had a propensity to hunt big game such as lions and tigers, which were seen as an imperial entitlement, they also hunted nilgais, black buck, deer, antelope, boars, wild ass, buffalo, and smaller game and birds, and coursed alongside captured and tamed cheetahs; they also captured and trained elephants. The emperor Jahangir, for instance, who ordered detailed lists of animals taken to be compiled by his scouts and huntsmen after every hunt notes in his memoirs, the *Jahangirnama*, that from the age of twelve until his fiftieth year 28,532 animals, including big game, and 13,964 birds were taken in his presence.¹ Mughal *shikargahs*, the ‘hunting grounds’, were

¹ Jahangir. *Tuzuk-i Jahangiri* [*Tuzuk*], trans. Alexander Rogers, ed. Henry Beveridge, 2 vols, London: Royal Asiatic Society, 1909, repr. 2003, vol.1, 369. For other editions of the memoirs of Emperor Jahangir, see Jahangir. *Jahangirnama: Memoirs of Jahangir, Emperor of India* [*Jahangirnama*], trans. Wheeler M Thackston, Washington D.C.: Freer Gallery, 1999; Jahangir. *Toozuk-i-Jehangeeree* [*Toozuk*], Pers. text ed. Syed Ahmad Khan, Aligarh, 1863-64.

situated in the divergent landscapes of India that included tropical jungles, montane forests, scrub vegetation and deserts.²

The aim of this study is to present a new understanding of the Mughal *shikargah*, the hunting ground, and indeed the hunting culture. It aims to show the ways in which the *shikargah* was conceptualised, constructed, utilised and represented during the time of the so-called ‘Great Mughals’ (Babur, Humayun, Akbar, Jahangir, Shahjahan and Aurangzeb ‘Alamgir, as the first six emperors were called). At the crux of the research is the proposition that, contrary to received wisdom that the hunting ground was *wilderness* filled with game animals, a site where the emperors could indulge in their favoured pastime of hunting, the Mughal *shikargah* was in fact a sophisticatedly *designed landscape* that reflected the prevailing political, social and cultural worldviews, a site capable of exhibiting kingship, supporting economy, advancing science, and engendering spirituality and knowledge. The five chapters compiled and presented here deal with the multifaceted and complex nature of the hunting culture and its relationship to the territories in which it takes place, the multiple functions it fulfils, the socio-political ramifications it reveals, and the artistic expressions it enables.³ They are unified in the dynamism and complex nature of the hunting culture that offers vignettes of imperial life in Mughal India. The chapters highlight the shared symbolism and universality of the hunt through its political, social and religious functions, and the uniformity of hunting practices that transcends time and geographical boundaries. The study hence offers a critical analysis of the ancient Persian hunting landscapes in general and the Mughal hunting ground in particular.

² For discussions on the divergent landscapes of the Indian sub-continent see Habib, Irfan. 1982. *Atlas of the Mughal Empire*, Delhi, Oxford University Press. See also Moosvi, Shireen. 1989. ‘Ecology, Population Distribution and Settlement in Mughal India’, *Man and Environment* 14/2; Abu’l Fazl notes that although Akbar preferred to hunt in hunting grounds near Agra, he also liked to travel great distances to access remote spots, see Abu’l Fazl. *A’in-i Akbari [A’in]*, 3 vols, vol.1 trans. H Blochmann, ed. D.C. Phillott, vols 2 and 3 trans. H.S. Jarrett, rev. Jadu Nath Sarkar, Calcutta: Asiatic Society of Bengal, 1927-49, repr. 2010, vol.1, 297. See also Mundy, Godfrey. *Pen and Pencil Sketches Being the Journal of a Tour in India [Pen and Pencil Sketches]*, 2 vols, London: John Murray, 1832, vol.1, 119-22. Mundy who was stationed in India in the 1820s notes that the savannahs and grasslands in the dry plains of Rohilkund gave way to thick tropical jungles and impenetrable undergrowth in the Himalayan foothills in a single overnight march and contained vastly different game animals.

³ The chapters comprise five papers that are either published or accepted for publication as referred journal articles or book chapters.

The studies presented here deal with various aspects of ‘cultural landscape’, understood as a natural setting mediated by culture. ‘It is both a represented and presented space’, as W. J. T Mitchell notes in ‘Imperial Landscape’.⁴ Mitchell notes that ‘landscape’ is primarily a medium of cultural expression, a physical and multisensory medium in which cultural meanings and values are encoded, whether put there by man-made physical transformations or naturally occurring.⁵ This study engages with Mitchell’s idea of a ‘cultural landscape’ whereby the Mughals were able to inject cultural properties into their hunting landscapes that integrated the works of nature and of man. The naturally occurring environment of the game-filled terrain was altered by physical and political processes of landscape modification that carried semiotics of power and control over man and nature. It is an aim of this study to reflect on the political, social, intellectual and spiritual landscape of the Mughal *shikargah*, as manifested in the culture of the hunt, and its far reaching implications in the life of the Mughals, as portrayed in literature, visual depictions and archaeology.

The first Mughal emperor Babur was a direct heir to the Timurid throne who was forced out of his homeland and patrimony.⁶ Hunting, and its depiction in painting, took on an added significance to the Mughals as a means to demonstrate allegiance to the

⁴ Mitchell, W. J. T. 1994. ‘Imperial Landscape’ in *Landscape and Power*, W. J. T. Mitchell (ed.), Chicago: The University of Chicago Press, 5. Mitchell notes that while there is a genre of painting known as landscape with emphasis on natural objects, this subject is not simply a matter of raw material to be represented in paint but is already a symbolic form in its own right, 14.

⁵ Ibid., 1994, 14.

⁶ See Babur, Zahir al-Din Muhammad. *The Babur-nama in English: Memoirs of Babur [Baburnama]*, trans. Annette Susannah Beveridge, London: Luzac 1922, reprint New Delhi: Munshiram Manoharlal, 1990. For another edition of Babur’s memoirs see Babur, Zahiruddin Muhammad. *The Baburnama – Memoirs of Babur, Prince and Emperor*, trans. Wheeler M. Thackston, Washington DC: Freer Gallery, 1996. See also Muhammad Kasim Firishta (c.1570-1611), the author of *Tarikh-i Firishta*, who was a court chronicler in the employ of the Bijapur Sultans of the Deccan and provides another perspective on the early Mughal period. See Firishta, Muhammad Kasim. *Tarikh-i Firishta (History of the Rise of the Mahomedan Power in India Till the Year 1612)*, trans. John Briggs, 4 vols, London: Longman, 1829, repr. 1981, vol.2, 1-44; Another source for Babur is Muhammad Haider Dughlat. Dughlat was Babur’s cousin and his writing, *Tarikh-i Rashidi* marks the important transitional period of Babur’s early years in Central Asia and Afghanistan. See Dughlat, Muhammad Haider. *A History of the Moghuls of Central Asia Being the Tarikh-i-Rashidi of Mirza Muhammad Haidar Dughlat*, trans. E. Denison Ross, ed. N. Elias, London: Curzon, 1898. For discussions on the Timurid identity of the Mughals see Balabanlilar, Lisa. 2007. ‘Lords of the Auspicious Conjunction: Turco-Mongol Imperial Identity on the Subcontinent’, *Journal of World History* 18/1; Balabanlilar, Lisa. 2012. *Imperial Identity in the Mughal Empire: Memory and Dynastic Politics in Early Modern South and Central Asia*, London: I. B. Tauris; Subtelny, Maria Eva. 1997a. ‘The Timurid Legacy: A Reaffirmation and a Reassessment’, *Cahiers D’Asie Centrale* 3/4; Dale, Stephen. 1998. ‘The Legacy of the Timurids’, *Journal of the Royal Asiatic Society* 3/8.

Timurids and a continuation of their painting traditions.⁷ Hunting expeditions, *sair u shikar*, as the extended tours were called, were vast enterprises which involved hunting, travelling and encampment. The movement of the entire court and bureaucracy meant that the entourage became the mobile capital of the empire, and served a number of purposes: consolidate authority over vast areas; pretexts to train and mobilise armies; signal intent of armed intervention to intimidate rebels and carry out attacks; and assess the conditions of their subjects, enact courtly rituals and mete out justice.⁸

In the course of researching for the topic of the Mughal hunt, it became apparent that while primary texts contained much information about the particular hunt functioning as an inspection tour, the bravery displayed by the emperor, and the quantity of game taken, official sources are generally elusive on the nature and topography of the landscape of the *shikargah*. Lack of unified scholarly research in the field of the Mughal hunting landscapes was an overarching factor to pursue the topic.

Fragmentary references in Mughal sources indicate that the *shikargah* was an ecologically altered space, one which was conceptualised to function as more than an arena where the emperor could enact the hunt. By a process of semiotic deconstruction of several factors largely related to the culture of the hunt, a basic typology of the hunting ground emerges. This was a space far removed from conventional definitions of hunting

⁷ This topic has been covered in Chapter 5.

⁸ This topic has been covered in Chapter 1. For detailed descriptions of the encampment and advance camps called *peshkhana* see Abu'l Fazl, *A'in*, vol.1, 47-49, 55-56; also Richards, John F. 1998. 'The Formulation of Imperial Authority under Akbar and Jahangir' in *Kingship and Authority in South Asia*, John F Richards (ed.), Delhi: Oxford University Press. See also writings by European visitors to the Mughal court such as Bernier, Francois. *Travels in the Mogul Empire [Travels]*, trans. Archibald Constable, London: Oxford University Press, 1934, repr. 1983, 380-1; Monserrate, Fr. *The Commentary of Father Monserrate S J on the Journey to the Court of Akbar*, trans. J S Hoyland, annotated by S Banerjee, Humphrey Milford: Oxford University Press, 1922, 75-76. Courtly rituals enacted at camp are discussed in Chapters 1 and 2. See also the writings of Peter Mundy who witnessed Shahjahan's opulent processional entourage return from a hunting expedition, Mundy, Peter. *The Travels of Peter Mundy in Europe and Asia 1608-1667 [Travels]*, 5 vols, London: Hakluyt Society, 1924, vol.2, 192-4. Sir Thomas Roe, the ambassador of King James I was part of Jahangir's great entourage when he moved from Ajmer to Agra in 1616. He estimates that the royal train stretched for over three miles and that the tents pitched in the encampment covered a circumference of 20 miles. See Roe, Sir Thomas. *Embassy of Sir Thomas Roe to India, 1615-1619 as Narrated in His Journals and Correspondence*, W. Foster (ed.), London: Hakluyt Society, 1899, vol.2 320-327, 363. For instances of Akbar using the *shikargah* as a stage for meting out justice, advice and spiritual guidance see for example Abu'l Fazl, *A'in*, vol.1, 173. For the numerous instances where the *shikargah* was a venue to signal military intentions and warfare see Babur, *Baburnama*, 108, 138, 316 and Abu'l Fazl, *The Akbarnama of Abu-l Fazl [Akbarnama]*, 3 vols, trans. H. Beveridge, Calcutta: Asiatic Society, 1907-12, repr.2010, vol.2, 342-53, 342-53, 407-19.

grounds as a single form of natural terrain that was a wild, untamed and amorphous space in which hunting was the sole function. It was instead conceptualised as a negotiated terrain more complex than revealed in written sources and artistic depictions, and featured a variety of forms and functions.

A critical appraisal of the Mughal *shikargah* as indeed their hunting culture should take into account the wider range of the complex human-animal-environment nexus, which forms the main foci of the study. The interaction between the three players had a direct bearing on how the landscape of the *shikargah* was conceived and experienced. And the relationship took many forms, often dichotomous. In the field, for instance, the hunting method of the human protagonist had to be adapted to the natural lay of the land (hunting ground); the topography of the landscape in turn dictated the type of game available for the chase. Also, game animals were inextricably enmeshed in the human culture of the hunt and the physical features of the hunting ground. The lay of the *shikargah* enabled the placement of the nets when big game such as lions were cornered, which acted as a preventative aid to ensure the game did not escape, an important consideration for the superstitious emperors. A wide row of buffaloes in the front row between the hunter and the prey acted as a buffer and served as ‘stops’ to confine the game within the desired location inside the *shikargah*.⁹ Such defence mechanisms allowed the imperial hunter to ride on open howdahs atop tame elephants behind the buffaloes, and remain on the same side of the netting as the hunted. The topography of the hunting ground was also one of the determining factors for the use of the decoy hunt method.¹⁰ The *shikargah*, chosen for its appropriate vegetation that enabled the hunters to camouflage themselves, also facilitated the use of tame antelopes to lure and drive wild ones towards the predetermined spot where the imperial hunters waited, while other huntsmen acted as ‘stops’ to confine them to the hunting ground. The fact that the emperors were frequently beseeched by their subjects to rid the countryside of a menacing beast, thereby turning agricultural lands and rural landscapes into make-shift

⁹ Manucci, who witnessed a tiger hunt by Shahjahan using buffaloes as ‘stops’, and nets gives a detailed description in Manucci, Niccolao. *Storio do Mogor or Mogul India 1653-1708 [Storio]*, trans. William Irvine, 4 vols, London: John Murray, 1907, vol.1, 184-85.

¹⁰ Hunting techniques such as the *qamargha* and decoy hunt are discussed in Chapters 1 and 2.

shikargahs is another facet of the three-way equation.¹¹ The human-animal-environment relationship hence engaged with the political, social and cultural life of the Mughal society and is the most important factor that unites the complexities of the Mughal hunting culture.

The significance of the *shikargah* as an interactive space between the royal hunter and the diverse landscapes of the empire has been largely overlooked in contemporary Mughal historical studies in favour of the act of the hunt.¹² While the emperor's hunt was considered a vital aspect of Mughal 'civilised' society, the *shikargah* had pivotal roles to play in reflecting and even shaping the political, social, cultural and spiritual life of the elites. The Mughal hunting paradigm is best elucidated by the concept of the *shikargah* as a symbol of mediation between the emperor and forces of nature: wild nature was an existential threat to the longevity of his dynasty and his subjects and had to be ordered and subdued. However, it is the very existence of untamed nature that necessitated his intervention both bodily and spiritually with the natural realm, and his powers to kill, control, capture and tame animals that marked him as a leader who could bring balance and justice to his populace.¹³

In the main, landscape historians have traditionally explored the formal Mughal garden as a paradisiacal space, an earthly symbol of the Quranic paradise. Although there has been a concerted effort to study the cultural and economic aspects of the Mughal garden,¹⁴ the *shikargah* is not, as a rule, included as part of the altered landscapes of North India. Similarly, no dedicated study of the hunting ground-forest-agricultural land nexus has been attempted to date. Whilst Mughal art historical studies have devoted some reference to the hunting genre, these are a small part of the much larger study of Mughal painting in general, and few contain any reference to the depiction of the *shikargah*. There has not been a systematic Mughal hunting history that engages the imperial hunting ground, and there exists no comprehensive study as yet that is devoted to the

¹¹ The use of agricultural land as make-shift *shikargahs* is discussed in Chapters 1 and 3.

¹² Please refer to footnotes 16-19 and 40-47. Allsen remains one of the few academics who has devoted considerable scholarship to hunting parks such as the Achaemenid and Sassanian paradise. He mentions a few Mughal examples. See Allsen, Thomas T. 2006. *The Royal Hunt in Eurasian History*, Philadelphia: University of Pennsylvania Press.

¹³ The universality of this concept spans vast geographical areas throughout Eurasia through the ages. See Allsen, 2006, 162.

¹⁴ See footnote 21.

study of the hunt in Mughal painting. Mughal socio-political and cultural historians have not traditionally examined the complex topic of Mughal studies through the window offered by the imperial hunt or its landscapes. By exploring the Mughal *shikargah*'s relationship to the ecology, its political, cultural and social aspects, the implications of its links to related spaces such as agricultural lands, the ramifications of its use as an intellectual space that addresses the relationship between science, religion, ethics and spirituality, and the nuances of hunting paintings, this study provides another useful prism through which to view the Mughal world. By attempting to retrace Mughal history through the agency of the imperial hunt and the *shikargah*, the study addresses an important gap in Mughal studies.

Sources and Approach

Mughal historiography is characterised by a distinct focus on a select few primary sources, such as the *Akbarnama* and the *A'in-i Akbari*, which have been elevated to an authoritative status. Scholarly writings on Mughal history tend to be largely uncritical representations and readings based on these key sources. However, it is important to note the significance of minor texts. These include *akhbarat*, or newsletters, during specific periods such as the *Akhbarat- Darbar-i Mu'alla: Akhbarat-i Shazada Muhammad Azam wa Akhbarat-i Bahadur Shah*, writings by *munshis*, or scribes, such as Sujan Rai's *Khulasat at-Tavarikh*, Malikzada's *Nigarnama-munshi*, and many others discussed in each chapter, which have been valuable records for this study. Accounts by European travellers to the Mughal court also contain extensive details of hunting histories, often in more detail than Mughal sources, which could be attributed to the magnitude of the hunt, and complexities of the hunting institution, as they were on a scale they were unaccustomed to in Europe.

Primary Sources

A vast corpus of archival records exist for the history of the Mughals.¹⁵ Mughal primary sources include several genres: the *nameh/nama* texts, which are memoirs and panegyric

¹⁵ The thesis has been based on a variety of Persian primary sources. My interpretations have been largely based on English translations of these texts. I have consulted the original Persian sources to identify

biographies by court historians that also include accounts of perfect deeds of emperors and courtiers; administrative gazetteers such as the *A'in*; *tarikh* or historical narratives; *tazkireh* written as biographies; *qanun* or legal texts; *waqi'at* or a narrative of events; and *akhbarat* or imperial newsletters. However, the complex nature of the hunting culture necessitates a teasing out of relevant materials pertaining to the hunting landscape. For Babur, his autobiography the *Baburnama* offers a wealth of information about the Timurid hunting landscapes, and the definition of *bagh* and broader connotations which embrace a host of related terrains into the Mughal idea of the 'garden'. The *Tabaqat-i Baburi* by his courtier Zain Khan also contains some references to Babur's hunting activities. The *Tarikh-i Rashidi* by Muhammad Dughlat, Babur's cousin, provides valuable information on the culture and politics during the important transitional period that marked Babur's early years in Central Asia and Afghanistan. For Humayun's reign, *Qanun-i Humayuni* by his courtier Khwandamir, the *Tazhkiratu'l waqi'at* by his ewer-bearer, Jawhar Aftabachi, the *Tarikh-i Humayun* by Bayazid Bayat, and the *Humayunnama* by his sister and Akbar's aunt Gulbaden Begum are the main sources. Although fragmentary, two important aspects of the hunt can be deduced from these sources: the far-reaching influence of the *Tura-i Chingizi* in both Safavid and Mughal hunting etiquette, and the royal hunt, significant though it may be in projecting power and authority, being converted into a search for food during his arduous years of exile. Abu'l Fazl's monumental biography of Akbar, the *Akbarnama*, and its voluminous compendium, the *A'in-i Akbari* remain the most important sources for his reign. Although

relevant passages for translation where translations were not available. Additionally, most translations of the primary texts were done in the 1920s, and therefore often antiquated and literal, and commentaries often skewed. However the Persianist Wheeler Thackston has produced new translations of Babur's *Baburnama* and Jahangir's *Jahangirnama*.

According to Thackston, Babur's Chagatay Turkic is 'fluid, idiomatic and colloquial'. See Wheeler Thackston's Preface to Zahiruddin Muhammad Babur. 1996. *The Baburnama – Memoirs of Babur, Prince and Emperor*, Washington D. C.: Freer Gallery, xxii – xxiii. However, Annette Beveridge's translation done in 1912-1921 does not reflect the nuances of the simple text - it is literal, with words translated verbatim.

Thackston notes that the translations of Alexander Rogers and Henry Beveridge who first translated Jahangir's memoirs, the *Tuzuk-i Jahangiri* while 'exceptionally precise and correct', do not reflect Jahangir's fluid, colloquial style, which has been set right in his new translation. See Wheeler Thackston's Preface to Nuruddin Muhammad Jahangir, 1999. *The Jahangirnama, Memoirs of Jahangir, Emperor of India*, Washington D. C.: Freer Gallery, ix-x. Reliance on old-fangled translations of Persian texts has thus been a limitation.

a panegyric account, it is still the most important reference for Akbar's reign. The *Akbarnama* contains the most relevant material for the political, social and spiritual ramifications of the hunt, and contains frequent justifications of the hunt as a tool of good governance. Abu'l Fazl has also devoted an entire chapter in the *A'in* to hunting. Detailed hunting and capturing techniques, training methods, hunting etiquettes, animal psychology, locations of favoured *shikargahs*, and upkeep of the animals for optimal benefits are some of the most comprehensive materials that were used in the course of this study. The *A'in-i Akbari* also contains important information on the extent of agriculture. The *Tarikh-i Akbari* by Muhammad Arif Qandhari is another valuable source of information for Akbar's reign. The *Muntakhab-ut-Tawarikh*, a three-volume historical account of the reign written by the extremely orthodox courtier, 'Abd al-Qadir Badaoni, who often disapproved of Akbar's religious eccentricities can be seen as a counter to Abu'l Fazl's laudatory accounts especially in matters of spirituality. The *Tabaqat-i Akbari* written by another courtier, Nizam al-Din Ahmed, is generally regarded as the more neutral of these accounts. Jahangir's memoirs, the *Tuzuk-i Jahangiri*, also called the *Jahangirnama*, is a frank, vivid and insightful account of his reign. His narrative portrays him as a connoisseur of the arts, a naturalist and a dedicated hunter. His penchant for the specifics ensures very detailed descriptions of the hunt, landscapes, flora and fauna, with court artists providing naturalistic paintings of natural history and the hunting genre. The courtier Mu'tamad Khan's *Iqbalnama* is a relatively short account of Jahangir's reign based on the memoirs. Shahjahan's reign is recorded by Muhammad Salih Kambo in his *Amal-i Salih*, Abdul Hamid Lahori in the *Padshahnama* and his librarian Inayat Khan in the *Shahjahannama*. Lahori's account is especially relevant to this study as it contains a wealth of details about architecture, including some hunting *mahals* (palaces), information regarding new *qamargha* (battue ring-hunt) techniques, and the process by which the Karara *shikargah* was created. Aurangzeb's reign is documented in Musta'idd Khan's *Ma'asir-i Alamgiri*. An outstanding primary source is the *Ma'athir-ul-Umara* by Shahnavaz Khan Awrangabadi and his son 'Abd al-Hayy. It is a biography of Muslim and Hindu officers of the Mughal court from 1500 to about 1780.

Several animal treatises such as falconry manuals called *baznamas*, and hunting treatises called *shikarnamas* were actively produced by pre-Mughal, Mughal and regional

kingdoms. These include the *Qawanin al-saiyad* of Khuda Yar Khan Abbasi written between 1336 and 1353 in India; the *Shikarnama-i Qutb Shahi* by Sadr-i Jahan al-Taishi in the Deccani kingdom of Golconda in 1578; the *Shikarnama* by Nawab Qutub Yar Jung. Several treatises on falconry (*Baznama*) were in circulation, many written by imperial *mir shikars*, or ‘masters of the hunt’. These include *Baznama* by Muhibb ‘Ali Khan Khass Mohalli, *Mir’atu’s-sa’id* (1699-1700) of Allah Yar Jami, the *Shahbaznama-i Firuz Shah* of Firuz Shah, and *Dasturu’s-sa’id* of Rida Yusuf. These texts deal mainly with the capture and training of cheetahs, birds of prey and other animals for hunting, optimal conditions for training, animal characteristics, and ailments and remedies.

Selected primary sources of non-Mughal origin which include pre-Mughal texts and accounts by European travellers to the Mughal court were consulted and used extensively in the course of this study. Pre-Mughal works, which were significantly influential for the Mughals, include the history of the Chingisid emperors, *Tarikh-i Jahan-gusha* by ‘Ala-ad-Din ‘Ata-Malik Juvaini, and Ahmad ibn Arabshah’s Timurid history, *Aja’ib al-Maqdur fi Nawa’ib al-Taymur* or *The Wonders of Destiny in the History of Timur*. *Tabaqat-i Nasiri* by Qazi Minhaj-i Siraj Juzjani is a history of the first Muslim invaders of India, the Ghurids. The most important sources for the Sultanate period include two court histories for the reign of Sultan Firuz Tughlaq namely the *Tarikh-i Firuz Shahi* by Zia-ud Din Barani and the other also called the *Tarikh-i Firuz Shahi* by Shams-i Siraj ‘Afif. Mahomed Kasim Firishta (c.1570-1611), the author of *Tarikh-i Firishta*, was a court chronicler in the employ of the Bijapur Sultans of the Deccan who provides another perspective on the early Mughal period. Despite its obvious setbacks, *The History of India, as Told by Its Own Historians*, comprising eight volumes of translations of medieval Persian chronicles by H. M. Elliot and John Dowson, is an invaluable source of information.

Detailed memoirs and accounts by European travellers to the Mughal court are an excellent source of information on political hunting. Francois Bernier, Peter Mundy, Godfrey Mundy, Niccolao Manucci, Francisco Pelsaert, Sir Thomas Roe, Jean de Thevenot, Jean-Baptiste Tavernier and Father Monserrate were especially fascinated by the Mughal hunting culture and details of the courtly hunting expeditions and the

magnitude of the encampments. Their writings thus provide invaluable details on the topic whilst also confirming the facts provided by Mughal sources.

Selected ancient Indian Sanskrit texts concerning various aspects of the hunting culture were also used in the study. These include the influential *Arthashastra* of Kautilya (2nd century BCE-3rd century CE), the *Sushruta-samhita* of Sushruta (c. 600 BCE), and the invaluable *Manasollasa* written by the Chalukya king Somesvara III (12th century).

Approach

The approach adopted for this study is based on documentation and analysis of textual records drawn from a variety of sources, including histories, literature and official documents. It involves visual observations and analysis of miniature paintings, and archaeological sites. However, with a dearth of extant hunting grounds and the ruinous state of hunting palaces that are isolated from its natural environs due to encroaching populations and agricultural lands, archaeology as a medium of analysis has been limited in scope. Hence the central methodological approach has been limited to two media, namely textual and visual. As the primary textual and visual sources do not provide the precise information needed to formulate a picture of the imperial hunting ground and its multifarious aspects, the main challenge has been in articulating a strategy to interrogate these sources, to read between lines of the texts and to decipher the corresponding painting where available. A direct reading of primary texts alone, in isolation, offers limited scope for the interpretation of the rhetorical powers of the natural and cultural landscape of the *shikargah* and its depiction in paintings. By adopting a widely-scoped interrogative strategy, a distinct set of questions regarding pragmatic unembellished facts often yielded a multitude of indirect interpretive aspects of the hunting landscape, leading to new pathways of fruitful examination.

The overarching theme of the multiple studies compiled here concerns the wide-ranging socio-political, and cultural power seen in the human-animal-environment relationship inherent in the *shikargah*. A set of critical questions pertaining to the chapters are used to link together the compiled studies and to form a unified whole. The Historical Background section is articulated in response to two questions: in what ways did a continuation of ancient Persian and early Islamic hunting traditions and practices

contribute to shaping the Mughal *shikargah*'s distinctive character? And how did the Mughals convert it into their exclusive legacy?

Chapter one is driven by two questions: in what manner did the physical processes of environmental modification reflect Mughal power in the creation of the favoured *shikargah*? And how were landscape transformations, originally meant for aesthetic purposes and specific hunting techniques, converted to accommodate courtly and bureaucratic functions, encampments of armies and war machinery with implications of socio-political and cultural power?

Chapter two provides responses to three questions: what were the ramifications of the Mughal practice of assimilating 'garden' spaces into their hunting grounds? Were the two spaces experienced in similar ways? And how did the appropriation and refashioning of nature and landscapes morph into projections of power? While Chapter three answers the questions: how did the need for new agricultural spaces and the subsequent agrarian policies lead to an increase in demand for deforestation, which in turn resulted in the creation of more hunting spaces? And how did the Mughal emperor reconcile conflictual spaces such as agricultural lands, forests and hunting grounds as mutually beneficial?

Chapter four provides responses to the questions of how effectively did the Mughal emperor use the occasion of the hunt to further scientific and technological knowledge by engaging the influential *akhlaq* (ethics) texts? And how did he successfully manipulate moral and ethical undertones inherent in perceptions of science, and enabled by the hunt into aspects of good governance? Whereas Chapter five focuses on the question of how did the artist of Mughal hunting paintings manipulate it to become yet another instrument to project the political power of the empire?

These questions are directly related to the projected aims of this study. Each set of these questions has enabled the opening of fresh interpretative possibilities of the same primary texts. This led to other avenues in indirect but related fields where other questions were posed to the primary texts. Each of these chapters show hunting in a different light and as different experiences. While the objective handling of sources has been a fundamental principle of my approach, my personal reading of the texts has inevitably coloured my interpretations and speculations.

Contributions, Literature Review and Limitations

The crux of this thesis is to present the Mughal hunting ground and the institution of the hunt in a new light. Much more than a leisure-oriented undertaking, conceptions of both the ground and the institution had far-reaching ramifications in relation to our understanding of gardens, agriculture, forestry, economy, politics, governance, and spirituality. They also enable a unique narrative through which the Mughals expressed their social and cultural history and world-views. My contributions have been to offer a new understanding of the territorial outreach of the *shikargah*, and to re-introduce the hunting culture as merging into the realms of knowledge and spirituality.

Writings on the Mughal hunting genre remain relatively limited in number and range and each covers single aspects of the hunt. These include critical studies on the subject of the depiction of wildlife that illustrated the *Baburnama*, *Akbarnama*, *Jahangirnama* and *Padshahnama*, analyses on the representation of a specific royal hunt and their implications, identification of the royal huntsmen and attributions to artists, various symbolic representations and political ramifications. The Mughal hunting ground is not discussed in these works with the exception of two outstanding art historical analyses on the visual depiction of the hunting landscape of a decoy-drive hunt.¹⁶

Chapter 1

In 'Reordering Nature: Power Politics in the Mughal *Shikargah*' my contribution is to highlight the various processes of environmental alterations made to the hunting ground to create a favoured imperial hunting ground, the *shikargah-i muqarrar*, and the ways in which these landscape modifications were manipulated to reflect political power. I analyse how these physical transformations, initially undertaken for aesthetic concerns and specific hunting techniques, were converted to accommodate courtly activities, encampments, and war games that ultimately projected Mughal socio-political and cultural power.

¹⁶ See Koch, Ebba. 1998. 'Dara-Shikoh Shooting Nilgais: Hunt and Landscape in Mughal Painting' *Freer Gallery Occasional Papers* 1; and Smart, Ellen. 1979. 'A Recently Discovered Mughal Hunting Painting by Payag', *Art History* 2/4.

For the study of the Mughal *shikargah* as the site of power politics, Thomas Allsen's work is an invaluable introductory source material. It is possibly the most comprehensive work available on the subject of the imperial hunt for vast geographical areas and spanning over three thousand years.¹⁷ Allsen covers a range of topics related to political hunting, its multifarious functions, and its wide applicability across Asia. The enormity of the subject means a coverage of great breath, which intentionally encourages the reader to research particular hunting practices. Other scholars have written on various political aspects of the hunt, notably Koch and Pandian. Ebba Koch's works on the paintings in the Windsor *Padshahnama* shed light on several different political aspects of the hunt such the significance of the lion hunt, and the decoy hunt.¹⁸ Anand Pandian's article explored other aspects of the politics of the hunt not discussed elsewhere. He posits that as a metaphor for sovereignty, the imperial hunt conveyed the 'fearful grandeur' and capabilities of the emperor to subdue insubordinate grandees and rivals to the throne; as a military tactic, the hunt enabled pursuit of seditious officers; as a ritual form, it was a stage for the forgiveness and incorporation of the subdued rebels into the imperial polity.¹⁹ While Koch and Pandian have underscored the political nature of the act of the hunt, they do not elaborate on the semiotics underlying the physical space of the *shikargah* as a symbol of mediation between the emperor and wild nature. This is the main focus of my work in 'Reordering Nature'.

Chapter 2

A large corpus of work on the typology, design details and planning of Mughal gardens exists; the genre started with Constance Villiers-Stuart's pioneering work in 1913. These exist as part of Islamic garden studies or as independent works.²⁰ Mughal landscape

¹⁷ See Allsen, 2006.

¹⁸ See Ebba Koch's commentary on three hunting paintings (numbers 30, 33 and 46) in Beach, Milo Cleveland and Koch, Ebba eds. 1997. *King of the World: the Padshahnama, an Imperial Mughal Manuscript from the Royal Library, Windsor Castle*, London: Azimuth.

¹⁹ Pandian, Anand. 2001. 'Predatory Care: The Imperial Hunt in Mughal and British India', *Journal of Historical Sociology* 14/1.

²⁰ See Villiers-Stuart, Constance. 1913. *The Gardens of the Great Mughals*, London: Adam and Charles Black; Ruggles, D. F. 2008. *Islamic Gardens and Landscapes*, Philadelphia: University of Philadelphia Press; Moynihan, Elizabeth. 1980. *Paradise as a Garden in Persia and Mughal India*, London: Scholar Press; Macdougall, Elisabeth and Ettinghausen, R. (eds.). 1976. *The Islamic Garden*, Washington D. C: Dumbarton Oaks, particularly Pinder-Wilson, Ralph. 1976. 'The Persian Garden: *Bagh* and *Chaharbagh*'

studies in recent decades have moved away from the exclusive stereotypical depictions of Mughal gardens as earthly reflections of the Quranic paradise gardens and showed that aside from the obvious symbolic connotations, gardens also had political, courtly and economic functions. Many offer new insights on the meanings of the Mughal garden and a sound understanding of the relation between form and function.²¹ However, these studies have not included the Mughal *shikargah* as integrating with the extended form of the garden space. And Mughal landscape studies have been largely concerned with formally designed garden spaces.

The hunting landscape's spatial and functional links to Mughal 'garden' spaces requires an in-depth exploration of its historical antecedent, the Achaemenid *pairidaeza* paradise park. This has been possible by reference to the extensive writings of Xenophon, such as the *Anabasis*, *Cynegeticus*, *Hellenica*, *Cyropaedia* and *Oeconomicus*.²² Following extensive archaeological excavations of the Achaemenid palace at Pasargadae by David Stronagh and others, Ralph Pinder-Wilson filled in the all-important clue that linked the adoption and adaptation of the *pairidaeza* by the Sassanians (224-651 CE) and its

in *The Islamic Garden*, Macdougall, Elisabeth and Ettinghausen, R. (eds.), Washington D. C: Dumbarton Oaks. The evolution of the Persianate gardens has been covered at length by Wilber, Donald. 1979. *Persian Gardens and Garden Pavilions*, Washington D. C.: Dumbarton Oaks; Gharipour, Mohammad. 2013. *Persian Gardens and Pavilions: Reflections in History, Poetry and the Arts*, London: I B Tauris. I have not mentioned those works that deal exclusively with garden as paradise symbolism.

²¹ See for instance for instance Wescoat, James L. and Joachim Wolschke-Bulmahn (eds.). 1996. *Mughal Gardens: Sources, Places, Representations, and Prospects*, Washington D.C.: Dumbarton Oaks especially the chapters: Wescoat, James L. 1996. 'Gardens, Urbanization, and Urbanism in Mughal Lahore: 1526 – 1657' and Habib, Irfan. 1996. 'Notes on the Economic and Social Aspects of Mughal Gardens'. See also Hussain, Mahmood, Rehman, Abdul and Wescoat, James eds. 1996. *The Mughal Garden: Interpretation, Conservation and Implications*, Rawalpindi: Ferozsons especially the chapters: Koch, Ebba. 'The Char Bagh Conquers the Citadel: An Outline of the Development of the Mughal Palace Garden', Rajput, Shahid Ahmad. 'The Mughal Garden "Wah" Near Hasanabdal: Source Material, Report of Excavations of 1993-94 and New Discoveries'; Rehman, Abdul 'The Mughal Concept of Gardens: An Enquiry into Shah Jahani Sources'.

See also Asher, Catherine. 1991. 'Babur and the Timurid Char Bagh: Use and Meaning', *Journal of the Islamic Environmental Design Research* 1-2; Koch, Ebba. 2007. 'My Garden is Hindustan: The Mughal Padshah's Realization of a Political Metaphor' in Michel Conan ed., *Middle East Garden Traditions: Unity and Diversity, Questions, Methods and Resources*, Washington D. C.: Harvard University Press, and Koch, Ebba. 2001. 'The Mughal Waterfront Garden' in *Mughal Art and Imperial Ideology, Selected Essays*, Ebba Koch (ed.), New Delhi: Oxford University Press.

²² Xenophon. *Anabasis*, trans. and ed. Carleton L. Brownson, 7 books, Cambridge, MA: Harvard University Press, 1922; Xenophon. *Hellenica*, trans. and ed. Carleton L. Brownson, 7 books, Cambridge, MA: Harvard University Press, 1918-21; Xenophon. *Cyropaedia*, trans. Walter Miller, Loeb Classical Library, Cambridge MA: Harvard University Press, 1994; Xenophon. *Oeconomicus*, trans. E. C. Marchant, Loeb Classical Library, Cambridge MA: Harvard University Press, 1959; Xenophon, *Cynegeticus*, trans. H. G. Dakyns, London: Macmillan & Co., 1897.

eventual transformation into the Islamic paradise garden.²³ Subtelny discusses how the Timurids absorbed elements of the Persian garden but extended its form and function to include encampment sites and agricultural lands, which then became the model which Babur transported to India. The *Irshad al-zira'a*, an influential Timurid agricultural manual based on the work of Herati landscape architect Mirak-i Sayyid Ghiyas who later travelled to India to work on Babur's gardens in Agra and Dholpur, thus helped establish a direct invaluable link between Timurid and Mughal landscapes.²⁴ Mughal gardens as a continuum of Shaybanid and Timurid gardens are also discussed in R. D. McChesney and Gauvin Bailey.²⁵ McChesney first highlighted a Shaybanid commercial document, an *iqrar*, concerning the sale deeds of a certain Juybari family, 1544-77, an unlikely source that links the extended garden landscapes to hunting grounds in Central Asia. There are several anecdotes in Mughal primary sources such as the *Bayaz-i Khwushbu'i* of hunting and encampments in garden contexts which are analysed by Bailey.

James Wescoat's vast body of work has been instrumental in establishing the territorial context of early Mughal gardens.²⁶ He suggests a contextual interpretation for Mughal gardens as a denotation of the garden concept was not completely distinct from a variety of related spaces which could have included the hunting ground. He notes that late Timurid and Mughal gardens often integrated related spaces such as working farms, orchards, market gardens, meadows and grazing fields, vineyards and built structures that functioned as encampment sites, imperial residences and places to hold courtly rituals.

²³ Pinder-Wilson, 1976.

²⁴ Subtelny, Maria Eva. 1997a.; See also Subtelny, Maria Eva. 1993. 'A Medieval Persian Agricultural Manual in Context: The *Irshad al-Zira'a* in Late Timurid and Early Safavid Khorasan', *Studia Iranica* 22/2; Subtelny, 1997. 'Agriculture and the Timurid *Chaharbagh*: The Evidence from a Medieval Persian Agricultural Manual' in *Gardens in the Time of the Great Muslim Empires: Theory and Design*, Attilio Petruccioli (ed.), Leiden: Brill.

²⁵ Petruccioli, Attilio ed. 1997. *Gardens in the Time of the Great Muslim Empires: Theory and Design*, Leiden: Brill, particularly the chapters: McChesney, R. D. 'Some Observations on "Garden" and its Meanings in the Property Transactions of the Juybari Family in Bukhara, 1544-77'; Bailey, Gauvin. 'The Sweet-Smeeling Notebook: An Unpublished Mughal Source on Garden Design'.

²⁶ See for instance Wescoat, James. 1992. 'Gardens versus Citadels: The Territorial Context of Early Mughal Gardens' in *Garden History: Issues, Approaches, Methods*, John Dixon Hunt (ed.), Washington D. C.: Dumbarton Oaks; Wescoat, James. 1986. 'The Islamic Garden: Issues for Landscape Research', *Journal of the Islamic Environmental Design Research* 1; Wescoat, James. 2011. 'The Changing Cultural Space of Mughal Gardens, in *A Companion to Asian Art and Architecture* Rebecca Brown and Deborah Hutton (eds.), Oxford: Wiley-Blackwell; Wescoat, James. 1989. 'Picturing an Early Mughal Garden', *Asian Art* vol.2/4.

My work has built on this alternate interpretation of what constituted a Mughal ‘garden’. In ‘Mughal Hunting Grounds: Landscape Manipulation and “Garden” Association’, I have been able to show that through various processes of landscape modifications these spaces were also assimilated in the *shikargah*, and the institution of the royal hunt accommodated the same functions as garden sites. My work has demonstrated that the *shikargah* was not spatially and culturally isolated from garden denotations and related spaces. This is an original contribution as it argues for the inclusion of the *shikargah* in garden research and an essential part of Mughal landscape studies.

Chapter 3

In ‘Hunting Ground, Agricultural Land and the Forest’ I have articulated the sustainable interdependency that existed between the three most important and valuable components of Mughal landscapes, namely agricultural lands, forests and the imperial hunting ground in spatial, cultural and political perspectives. This is another original contribution of the study. The Mughal *shikargah*, which was invariably sited on deforested areas at the edge of cultivated belts, was perceived as a transitional zone between agricultural lands and forests. By exploring a cultural reading of the spatiality and functions of the territories concerned, the relationship with the actors concerned, and the semantics and semiotics of hunting and cultivation, I have proposed the notion that while the cultivated land and *shikargah* were often seen as conflictual spaces due to the detrimental effect of hunting practices on agricultural growth, they were also seen as mutually beneficial spaces due to the contributions the sophisticated hunting practices made to agriculture.

A substantial body of work exists on the various aspects of the agrarian institution of Mughal India, agricultural revenue and the economy, land administration, landholdings, revenue-free grants, revenue assignments, the various players involved and the social and economic role of the *zamindars* (defeated local rulers and large landowners), and the ramifications thereof. Based on the statistics provided in the *A'in*, and a thorough scrutiny of a multitude of minor primary sources Irfan Habib has produced a *tour de force* of Mughal economic and political history in the classic *The*

Agrarian System.²⁷ Of particular relevance for my thesis were his definitions of cultivated land and its blurred parameters; his new interpretations of the Mughal revenue system based on agricultural productions; and the organisation of the rural community. He also discusses at length the prevailing attitudes towards cultivation and forests, and the extent of deforestation undertaken to enable and extend cultivation.

Chetan Singh's study draws attention to the perception of forests as lawless, uncultivated and inhospitable spaces that encouraged the existence of rebellious chieftains and made the imperial marches to quell such rebellions arduous; it was the antithesis of the Mughal conception of what constituted a 'civilised' society, namely one engaged in agriculture.²⁸ An influential group of scholars such as S. Nurul Hasan, Shireen Moosvi, Satish Chandra Muzaffar Alam and André Wink have opened up new avenues of research especially on the *zamindari* system and their role in deforestation.²⁹ Moosvi has also highlighted the extent of elephant and cheetah forests based on statistics in the *A'in* and imperial hunting patterns, and the territories lost due to cultivation.³⁰

Irrigation systems and other waterworks built exclusively to enhance and extend cultivation, served another purpose of attracting wildlife thus offering the imperial hunters plenty of opportunities to indulge in the chase and develop *shikargahs* on which were sited elaborate hunting palaces and lodges. The three most important studies on Mughal and pre-Mughal irrigation works and canal systems by Abha Singh, Iqtidar Siddiqui and Anthony Welch offer just a passing reference to the *shikargahs* sited at

²⁷ Habib, Irfan. 1963. *The Agrarian System of Mughal India 1556-1707*, New Delhi: Oxford University Press; See also Habib, Irfan. 1982. *An Atlas of the Mughal Empire*, New Delhi: Oxford University Press.

²⁸ Singh, Chetan. 1995. 'Forests, Pastoralists and Agrarian Society in Mughal India in *Nature, Culture, Imperialism: Essays on the Environmental History of South Asia*, David Arnold, Ramachandra Guha (eds.), New Delhi: Oxford University Press.

²⁹ Moosvi, Shireen. 1987, rev. 2015. *The Economy of the Mughal Empire c.1595: A Statistical Study* (New Delhi: Oxford University Press; Hasan, Nurul S. 2005. *Religion, State and Society in Medieval India*, New Delhi: Oxford University Press, particularly the essays dealing with 'Rural Economy and Towns'; Alam, Muzaffar. 1991. 'Eastern India in the Early Eighteenth Century "Crisis": Some Evidence from Bihar', *The Indian Economic and Social History Review* 28/1; Hasan, S Nurul. 1964. 'The Position of the Zamindars in the Mughal Empire', *The Indian Economic and Social History Review* 1/4; Hasan, S Nurul. 1969. 'Three Studies of Zamindari System, *Medieval India: A Miscellany*, 1; Moosvi, Shireen. 1978. 'The Zamindar's Share in the Peasant Surplus in the Mughal Empire – Evidence of the *Ain-i-Akbari* Statistics', *The Indian Economic and Social History Review* 15/3; Wink, André. 1997. *Al-Hind: The Making of the Indo-Islamic World*, vol. 2, Leiden: Brill; Siddiqui, N. A. 1989. *Land Revenue Administration under the Mughals 1700-1750*, Delhi: Munshiram Manoharlal.

³⁰ Moosvi, Shireen. 1989. 'Ecology, population distribution and settlement in Mughal India', *Man and Environment*, 14/2.

these locations.³¹ Welch however discusses, albeit in not much detail, the important link between purpose-built water bodies and hunting landscapes.

Chapter 4

In 'The Imperial Mughal Hunt: A Pursuit of Knowledge' I discuss how writings on the Mughal hunting culture, as evident from the aforementioned sources, generated a distinct set of understandings that became dominant in the field. This is the idea that the Mughal emperor was obsessive in his pursuit of the chase as an imperial leisure-based activity, the consequences of which were symbolic, and had courtly and political implications. These included the image of the emperor as the metaphorical just hunter, who hunted to project justice and sovereignty as a continuation of his illustrious forebears; and the institution of the hunt as an extension of good governance, consolidation of empire, and elimination of subversive actors.³² My contribution to the field lies in taking the Mughal hunting culture beyond the conventional sense to a knowledge-based undertaking.

A few studies exist in the genre of the emperors' pursuit of natural history. These are mainly direct derivations from primary texts, primarily the *A'in-i Akbari* and the *Tuzuk-i Jahangiri*, as both Akbar and Jahangir were keen naturalists.³³ Alvi and Rahman have summarised the natural historical content of the *Jahangirnama* with intentionally minimum comments.³⁴ Ebba Koch explores how Jahangir fulfilled Francis Bacon's ideal of the perfect ruler whose attributes include acquisition of knowledge through natural

³¹ See for instance, Singh, Abha. 1992. 'Irrigating Haryana: The Pre-Modern History of the Western Yamuna Canal', in *Medieval India 1: Researches in the History of India 1200-1750*, Irfan Habib (ed.), New Delhi: Oxford University Press; Siddiqui, Iqtidar Husain. 1986. 'Water Works and Irrigation System in India During Pre-Mughal Times', *Journal of the Economic and Social History of the Orient* 29/1; Welch, Anthony. 1996. 'Gardens that Babur Did Not Like: Landscape, Water, and Architecture for the Sultans of Delhi', in *Mughal Gardens: Sources, Places, Representations and Prospects*, James Wescoat and J. Wolschke-Bulman (eds.), Washington D. C.: Dumbarton Oaks.

³² The imperial hunt was famously justified by Abu'l Fazl as reasons to conduct inspections of agricultural lands, and safeguard peasants from potentially oppressive revenue officials. See Abu'l Fazl, *A'in*, vol.1, 292. See also Koch, Ebba. 1996. 'The Just Hunter: Renaissance Calendar Illustrations and the Representation of the Mughal Hunt', in *Islam and the Italian Renaissance - Papers of a Colloquium held at the Warburg and the V&A*, A Contadini, N Mann (eds.), London: Victoria and Albert Museum.

³³ See for instance, Divyabhanusinh, 1987. 'Record of Two Unique Observations of the Indian Cheetah in *Tuzuk-i-Janhangiri*', *Journal of the Bombay Natural History Society* 84/2; Ali, Salim. 1927. 'The Moghul Emperors of India as Naturalists and Sportsmen', *Journal of the Bombay Natural History Society* 31/4, parts I, II, III.

³⁴ Alvi, M. A. and Rahman, A. 1968. *Jahangir – The Naturalist*, New Delhi: Indian National Science Academy.

historical investigation.³⁵ Abu'l Fazl devoted several *a'ins* to behavioural patterns, hunting instincts, anatomical characteristics, breeding details, medical issues and related concerns. Several other Indian and Mughal adaptations of these Sanskrit texts such as the *Salihotra somhita* were in wide circulation, and include *Farasnamas* (horse treatises) and *Baznamas* (treatises on birds of prey). Jahangir's *Jahangirnama/Tuzuk-i Jahangiri* is a rich and detailed exposé on the India's varied fauna as subjects for analyses and experimentation based on anatomy, taxonomy and psychology. Studies also indicate that there was a lively intellectual scene prevalent at court even if not widespread throughout the empire.³⁶ Some scholarship has targeted specific game animals and include information such as their status in mythology, zoological characteristics and behaviours, capturing and training techniques, and ecology and habitats, that span an extensive time frame from antiquity, early modern Mughal period, and British colonialism, and their conservation status in the recent past.³⁷

Art historians have also explored the portrayal of zoological subjects in the Mughal court and their importance as documents of scientific knowledge. Several chapters in Som Prakash Verma's book *Flora and Fauna in Mughal Art* are devoted to critical studies on the subject of the depiction of wildlife illustrations from the *Baburnama*, *Akbarnama*, *Jahangirnama* and *Padshahnama*.³⁸ Verma also provides a detailed commentary on the painting style of the artist Ustad Mansur who is widely

³⁵ Koch, Ebba. 2009. 'Jahangir as Francis Bacon's Ideal of the King as an Observer and Investigator of Nature', *Journal of the Royal Asiatic Society of Great Britain and Ireland* 19/3.

³⁶ See for instance Pollock, Sheldon ed. 2011. *Forms of Knowledge in Early Modern Asia: Explorations in the Intellectual History of India and Tibet, 1500-1800*, Durham: Duke University Press, especially the chapters: Pollock, Sheldon. 'The Languages of Science in Early Modern India', Alam, Muzaffar. 'The Making of a *Munshi*', Behl, Aditya. 'Pages from the Book of Religions: Encountering Difference in Mughal India', Sharma, Sunil. "'If There Is a Paradise on Earth, It is Here": Urban Ethnography in Indo-Persian Poetic and Historical Texts', and Tavakoli-Targhi, Mohamad. 'Early Persianate Modernity'. See also Mohiuddin, Momin. 1971. *The Chancellery and Persian Epistolography under the Mughals: From Babur to Shahjahan, 1526-1658: A Study on Inshá, Dar al-Insha, and Munshis Based on Original Documents*, Calcutta: Iran Society; Truschke, Audrey. 2016. *Culture of Encounters: Sanskrit at the Mughal Court*, New York: Colombia University Press; Khan, Iqbal Ghani. 1997. 'Scientific Concepts in Abu'l Fazl's *A'in-i Akbari*' in *Akbar and His India*, Irfan Habib (ed.), New Delhi: Oxford University Press.

³⁷ See Divyabhanusinh, 1995. *The End of a Trail: The Cheetah in India*, New Delhi: Banyan Books; Divyabhanusinh, 2005. *The Story of Asia's Lions*, Mumbai: Marg; Sukumar, Raman. 2011. *The Story of Asia's Elephants*, Mumbai: Marg, 2011; Rangarajan, Mahesh ed. 1999. *The Oxford Anthology of Indian Wildlife: Hunting and Shooting*, New Delhi: Oxford University Press.

³⁸ Verma, Som Prakash (ed.). 1999b. *Flora and Fauna in Mughal Art*, Mumbai: Marg, especially the chapters: Alvi, M. A. 'Jahangir's Passion for Exotic Animals', Verma, Som Prakash. 'Portraits of Birds and Animals under Jahangir', and Divyabhanusinh. 'Hunting in Mughal Painting'.

acclaimed as the most eminent of Mughal painters of natural history; he also discusses the prevalent historical and artistic environment in which Mansur worked.³⁹

Abu'l Fazl also devotes several *a'ins* to technological development. Akbar and his courtier Fath'ullah Shirazi are credited with the authorship of several inventions which would have made life during hunting expeditions more pleasurable. A few studies have also discussed the state of technology at the Mughal court. Habib's works have critically investigated these innovations while also assessing the general technological development in early modern India. He has also critically investigated these innovations while also assessing the general technological development in early modern India. Alvi and Rahman have also recreated drawings and workings of these contraptions.⁴⁰ These works, however, do not address the part played by the culture of the hunt.

In this chapter I have analysed how the sophisticated hunting culture became part of the scientific undertaking. The scientific and technological enterprise motivated by the hunt and during hunting expeditions was in turn used by the court to improve breeding programmes and hunting techniques. The acquisition of scientific, natural historical and technological knowledge is grounded in the impact of ethical *akhlaqi* texts on Mughal culture which postulate acquiring scientific knowledge as a religious obligation to achieve perfection. The *Akhlaq-i Nasiri* of Nasir al-Din Tusi and the *Akhlaq-i Jalali* of Jalal al-Din Muhammad Asad Dawani were the most influential ethical texts which validated science, ethics, morality and religion as interrelated concepts in Mughal cultural contexts. A number of writings have explored the ways in which *akhlaqi* texts have impacted the political, cultural and social life of the Mughals.⁴¹

³⁹.Verma, Som Prakash. 1999a. *Mughal Painter of Flora and Fauna, Ustad Mansur*, New Delhi: Abhinav Publications.

⁴⁰ See for instance, Habib, Irfan. 1997. 'Akbar and Technology' in *Akbar and His India*, Irfan Habib (ed.), New Delhi: Oxford University Press; Habib, Irfan. 1980. 'The Technology and Economy of Mughal India', *Indian Economic and Social History Review*, 17/1; Habib, Irfan. 1996. 'Reason and Science in Medieval India' in *Society and Ideology in India, Essays in Honour of Professor R. S. Sharma*, J N Jha (ed.), New Delhi: Munshiram Manoharlal Publishers; Alvi, M. A. and Rahman, A. 1940. *Fathullah Shirazi, a Sixteenth century Indian Scientist*, Delhi: National Institute of Sciences of India.

⁴¹ See for instance, Alam, Muzaffar. 2000. 'Akhlaqi Norms and Mughal Governance' in *The Making of Indo-Persian Culture – Indian and French Studies*, Muzaffar Alam et al. (eds.), New Delhi: Manohar Publishers; Alam, Muzaffar. 2004. *The Languages of Political Islam, India 1200-1800*, Chicago: University of Chicago Press; Khan, Iqtidar Alam. 2009. 'Tracing Sources of Principles of Mughal Governance: A Critique of Recent Historiography' in *Social Scientist*, 37/5-6.

The chapter also sheds light on the nature of science from Mughal perspectives. *Akhlaq* texts also advocate the image of the imperial hunter who had an obligation to subdue wild nature to protect his subjects and court paintings served to perpetuate this image. O’Hanlon and Nizami have addressed this aspect.⁴² I have engaged with O’Hanlon’s work in greater detail. Aside from presenting an alternate function of the imperial hunt as a motivator of scientific activities, my contribution also lies in assessing interrelated concepts of ethics, good government, religion and science within hunting contexts.

Chapter 5

In ‘The Artist’s Gaze’, my contribution has been to deconstruct the Mughal hunting painting in order to visualise the Mughal artist’s conceptualisation of the *shikargah* and draw parallels with its textual descriptions. By examining various artistic tools, select leitmotifs and visual hermeneutics I have attempted to decode the artist’s complex message he wished to convey to his viewer.

There remains no comprehensive study as yet dedicated to the hunt in Mughal painting. A number of articles have explored single aspects of the hunt as depicted in paintings. Skelton highlights several aspects of the Mughal hunting culture and the links to ancient Persian and Indian concepts of kingship and rituals concerned with lion hunts; the main line of discussion of the article is dating the paintings based on stylistic and technical comparisons with other manuscript paintings, and identifying the unknown artists and the imperial patron.⁴³ The aforementioned Ebba Koch’s work ‘Dara-Shikoh Shooting Nilgais’ is an outstanding article which underscores the connection between the representation of the landscape in the painting to the hunting technique. She also provides a critique of landscape paintings techniques, arrangement of figures, courtly conventions and depth-producing devices that were used by artists to illustrate decoy hunts that were in vogue during Shahjahan’s reign.⁴⁴ Ellen Smart examines other decoy hunt paintings in the Shahjahani era, and makes interesting comparisons between Mansur’s style and that

⁴² Nizami, Khaliq Ahmad. 1989. *Akbar and Religion*, New Delhi: Idarah-i-Adabiyat-i-Delli.

O’Hanlon, Rosalind. 2007. ‘Kingdom, Household and Body History: Gender and Imperial Service under Akbar’, *Modern Asian Studies*, 41/5.

⁴³ Skelton, Robert. 1969. ‘Two Mughal Lion Hunts’, *V&A Museum Yearbook* 1/38.

⁴⁴ Koch, Ebba. 1998. ‘Dara-Shikoh’.

of Payag.⁴⁵ Asok Kumar Das features Jahangir's hunting habits and details of hunts from the *Tuzuk*. It also examines the Indian Museum of Kolkata painting *Jahangir Impresses Rana Karan with his Skills* in detail and offers his take on identifying the leading participants in the hunt thereby overturning earlier views of Percy Brown.⁴⁶

Divyabhanusinh's chapter provides insight into lesser-known hunting practices and animal characteristics.⁴⁷ Amina Okada's article follows Robert Skelton's work to identify a small but influential group of paintings done for Prince Salim, the future Emperor Jahangir while he held a rebellious alternate court in Allahabad in 1599-1604. Skelton and Okada have analysed the form, symbols and stylistic details of the group, now dispersed, and note that they were possibly intended for inclusion in a *Shikarnama* or Hunting Album.⁴⁸

Ebba Koch provides much insight on the prevalent styles and moods in the royal atelier during the reign of Shahjahan and the symbolic implications of the image of the imperial hunter.⁴⁹ Gregory Minissale's book provides fresh new insights and interpretations of Mughal painting by focussing on multiple cultural readings and aesthetics underlying the painting traditions. By going against the grain of mainstream thought that Mughal painting techniques were overly indebted to 'superior' European techniques, Minissale offers thought-provoking contributions to the field of Mughal painting. Although there are few references to the hunting genre, I was able to adapt the general readings to particular characteristics, stylistic features and structures of the hunting painting.⁵⁰

One limitation of the thesis is the absence of a chapter dedicated to the architecture of Mughal hunting palaces. Although I have undertaken extensive fieldwork and documented most of the hunting palaces/pavilions in North India, I made a conscious

⁴⁵ Smart, Ellen. 1979. 'A Recently Discovered Mughal Hunting Painting by Payag', *Art History* 2/4.

⁴⁶ Das, Asok Kumar. 1967. 'Mughal Royal Hunt in Miniature Paintings', *Indian Museum Bulletin* 2.

⁴⁷ Divyabhanusinh, 1999b. 'Hunting in Mughal Painting' in *Flora and Fauna in Mughal Art*, Som Prakash Verma (ed.), Mumbai: Marg.

⁴⁸ Okada, Amina. 1992. 'Le Prince Salim à la Chasse: Une Miniature inédite peinte à Allahabad', *Artibus Asiae* 52/3; Skelton, Robert. 1988. "The Arts of the Book: Sultanate and Mughal India" in Robinson B. W. et al. (eds) *Islamic Art in the Keir Collection*. London and Boston: Faber and Faber.

⁴⁹ Koch, Ebba. 1997. 'The Hierarchical Principles of Shah-Jahani Painting', in Beach, Milo Cleveland, and Koch, Ebba (eds) *King of the World: the Padshahnama, an Imperial Mughal Manuscript from the Royal Library, Windsor Castle*. London: Azimuth.

⁵⁰ Minissale, Gregory. 2006a. *Images of Thought: Visuality in Islamic India 1550-1750*. Newcastle: Cambridge Scholars Publishing.

decision not to pursue an essay dedicated to the hunting palace firstly due to space and time constraints; and secondly, the architecture of the main hunting palaces has been covered by scholars.⁵¹ Based on my architectural documentation, I have described the Lal Mahal in Bari, Rupbas, Samugarh, Hiran Minar in Sheikhpura, Hashtsal Minar in Palam, the Burhanpur fort, palace and *ahukhana* hunting pavilion, the Pushkar hunting pavilion and the pavilion in Nur Chashma in reasonable detail in various capacities in the course of the five essays included in the thesis. But a comprehensive scholarship on the topic is long overdue.

The legal aspects of hunting in Islam and its relevance in the Mughal hunting culture has not been studied of date. Although it is an area which richly deserves focus I have not included it due to constraints of space. It is, however, a topic I intend to pursue in the near future.

Hunting and animal treatises is another genre of literature that has not received adequate scholarship. *Shikarnamas* (hunting treatises) and animal treatises, mainly *farasnama* (equine) and *baznama* (birds of prey) are scientific studies and mainly deal with zoological classifications, training, ideal conditions for upkeep, ailments, and cures. They are essentially scientific in nature but often interspersed with folklores, social commentaries of the age and natural historical details. This is another topic that is relevant to the thesis and seen as a limitation for not being included due to constraints of space and time. It is, however, another topic I intend to pursue in the near future.

Thesis Layout

Presenting the thesis as a compilation of independent published articles has posed a few editorial challenges in the compilation of the thesis.⁵² The Historical Background study,

⁵¹ Hughes, Jeffrey. 1988. 'Shah Jahan's Lal-Mahal at Bari and the Tradition of Mughal Hunting Palaces', Unpublished doctoral thesis, University of Iowa.

For brief descriptions of hunting palaces and pavilions in , see Asher, Catherine. 1992. *Architecture of Mughal India*, Cambridge: Cambridge University Press; also Koch, Ebba. 1991. *Mughal Architecture*, Munich: Prestel; Khan, A. N. 1991. 'Conservation of the Hiran Minar and Baradari', *Pakistan Archaeology*; Koch, Ebba. 1991. 'Copies of the Qutb Minar', *Iran* 29/1.

⁵² Basic facts pertaining to the Mughal culture of the hunt have been discussed in each of the articles at the request of editors. This may seem repetitive in the study. There is also an inconsistency in citation styles for notes and bibliography for each chapter as well as use of diacritical marks for Persian words due to the different demands placed by the editors. Compilation of published chapters has also presented a disjoint in the thesis page numbering.

‘Ancient Persian, Indian and Early Islamic Hunting Practices’, is a broad exploration of the hunting practices of the ancients – Persian and Indian, and the significant developments during the reign of the pre-Mughal Sultanate dynasty. It traces the origins of the typology, functions and experiences of the *shikargah* and the *chaharbagh* garden and highlights the universal symbolism of the hunt that transcends time and territory. The study also discusses the Sultanate practice of building a variety of waterworks that served a dual purpose: aiding cultivation and attracting game; and the custom of building hunting palaces or lodges near these sites.

Chapter 1, ‘Reordering Nature: Power Politics in the Mughal *Shikargah*’, reconstructs the processes, both physical and political, entailed in the founding and development of the *shikargah-i muqarrar*. The chapter begins with a discussion of the hunt and hunting ground used as instruments for political legitimation, whereby the Mughals drew on their illustrious forebears, the Achaemenids and Timurids, to justify the hunt as an agency of kingship and good governance. I then discuss the various processes of reordering nature involved in the creation and utilisation of the *shikargah*, such as deforestation and/or reforestation, damming and diverting rivers, building of imperial infrastructure, and driving in game animals from elsewhere, all which carried imposing messages of power and control over nature and the environment.

Chapter 2, ‘Mughal Hunting Grounds: Landscape Manipulation and “Garden” Association’, reinterprets the idea of the Mughal garden, distinct from prevailing, and often stereotypical, definitions of gardens with an exclusive typology featuring formal layouts and water features as a Quranic paradise paradigm. Court chronicles imply that Mughal garden denotations also extended to incorporate agricultural lands, working farms and orchards, and fields that accommodated army encampments. My research suggests that the *shikargah-i muqarrar* could have been assimilated in the extended garden space, as was common in Timurid and Shaybanid practices, and the even earlier Achaemenid *pairidaeza*. The encampment and rituals enacted on its site further spatially and culturally linked the garden with the larger landscape elements such as the *shikargah*.

Chapter 3, ‘Hunting Ground, Agricultural Land and the Forest: Sustainable Interdependency in Mughal India 1526-1707’, concentrates on the demands placed on the forested spaces generated by two important characteristics of Mughal society, namely

agriculture and the complex imperial hunting needs. The chapter argues that a demand for deforestation resulted in differentiating the ‘natural’ landscape of the forests and the ‘modified’ landscape of the *shikargah*. Agrarian policies and its impact on the hunting ground, agricultural lands and the forest are examined at length. While agricultural lands and the *shikargah* can be seen as conflictual sites due to the detrimental effects of hunting on agrarian growth, I assess the extent to which the two spaces were mutually beneficial especially in view of irrigation policies.

Chapter 4, ‘The Imperial Mughal Hunt: A Pursuit of Knowledge’, explores the sophisticated hunting culture as an intrinsic part of the Mughal scientific enterprise. It discusses how the hunt promoted scientific development. The chapter also discusses science and knowledge acquisition from Mughal perspectives. It analyses the agency of the influential *akhlaq* (ethics) texts, and the religious, moral and ethical undercurrents involved in perceptions and practices of scientific knowledge in India. Hunting also enabled technological innovations which ensured greater success in war and hunt, and made imperial life more congenial during hunting expeditions.

Chapter 5, ‘The Artist’s Gaze: Visual Representations of the Mughal Hunting Landscape’ explores the visual depiction of the *shikargah* from the perspective of the Mughal artist. He was tasked with producing an aesthetically pleasing painting that reflected the cultural, political and spiritual world views inherently present in the complex nature of the hunting ground. The depiction of the emperor as the just hunter had to accommodate elaborate descriptions derived from Sufi, *ishraqi* and *akhaqi* texts. The artist had to offer his viewers a platform from which to see the hunting painting as allegories of kingship, spirituality, and nostalgia and memory of their illustrious forebears. The chapter discusses his use of symbolic tools, signs, visual metaphors and hidden meanings to express these notions.

2. HISTORICAL BACKGROUND

Ancient Persian, Indian and Early Islamic Hunting Practices

Achaemenid and Sassanian *Pairidaezas*

The *shikargah* is by no means an early modern Mughal phenomenon. Its origins, typology, functions and enshrined ideals can be effectively traced back to Mesopotamia. Based on Assyrian (2500-609 BCE) inscriptions of Sennacherib and Esarhaddon, and stone reliefs from the palace of Assurbanipal in Nineveh, Leo Oppenheim has reconstructed the Assyrian palace garden which were 'arranged as to imitate a wooded hilly terrain with paths and watercourses' and that they were scaled-down versions of the larger *ambassu* hunting park.⁵³ The *ambassu* was a hunting park planted with fruit orchards, olive groves and imported spice and herbal plants that was well-stocked with wild animals for ceremonial hunting according to the inscriptions by Sennacherib.⁵⁴ Archaeologist David Stronach also stresses that the Assyrian Assurnasirpal II (883-859 BCE) was the first monarch to view the extensively irrigated and bountiful landscaped garden as a vehicle for royal propaganda and that it helped reinforce the king's cosmic role in assuring fertility of the lands.⁵⁵ Hence these early Mesopotamian hunting preserves seem to have served a dual purpose of landscaped gardens and royal game parks. It is likely that the *ambassu* was the schemata for the Median (678-549 BCE) and Achaemenid (550-330 BCE) *pairidaeza* paradise park. *Pairidaeza* in Old Persian or *paradeisos* in Greek means 'enclosure' or 'domain' and indicative of its main characteristic as an enclosed imperial domain. The extensive writings of Xenophon (c. 430–354 BCE), a Greek mercenary who visited the Achaemenid court, together with the archaeological remains of the palace of Cyrus the Great (559-530 BCE) at Persepolis have enabled a reconstruction of the form and function of the imperial *pairidaeza* and its inner garden.⁵⁶ In the *Anabasis*, Xenophon mentions that Cyrus had a palace and a large

⁵³ Oppenheim, Leo. 1965. 'On Royal Gardens in Mesopotamia', *Journal of Near Eastern Studies* 24/4, 332-33.

⁵⁴ Cited in Oppenheim, 1965, 333.

⁵⁵ Stronach, David. 1990. 'Garden as a Political Statement: Some Case Studies from the Near East in the First Millenium BC', *Bulletin of the Asia Institute* 4, 172-3.

⁵⁶ The form and function of the *pairidaeza* are discussed in Chapter 2 and 3.

paradeisos filled with wild animals for the royal chase which he hunted on horseback, and that the Macander river flowed through the *paradeisos* and into the city of Celaenae; in Syria there was another enclosed *paradeisos* filled with fruit orchards.⁵⁷ Xenophon also notes that Achaemenid royalty hunted a diverse collection of animals in enclosed parks and some in ‘open spaces’⁵⁸ indicating that not all hunting grounds were enclosed parks. Paradise parks were constructed in all new territories annexed by the rulers and fully stocked with game for the chase.

Achaemenid paradise parks also had close associations with cultivated spaces. Xenophon notes that the Persians created paradises in all the districts they annexed, visited and resided that would be filled with game for the chase⁵⁹, and were planted with orchards, gardens, and ‘full of all good and beautiful things that the soil will produce’.⁶⁰ Two anecdotes in the *Cynegeticus* by Xenophon indicate the proximity of imperial hunting and agricultural lands. He notes that autumn is a better season to hunt rather than spring as the cultivable products of the soil are already garnered and hence the odours of it various fruits would no longer disturb the hunting hounds.⁶¹ He also notes that when hunting on cultivated land the hunter should avoid the crops.⁶² The translators of *Cynegeticus* E. C. Marchant and G. W. Bowersock opine that while it was either law or custom for hunters to hunt over growing crops, some basic etiquette had to be followed.

Lysander, a Spartan general who was sent on a delegation to Cyrus’s court observes of the paradise created by Cyrus at Sardis that he was astonished by the rectangular symmetry of the planted trees.⁶³ Symmetrical planting of orchards and fruit trees was also seen in Xenophon’s description of the *pairidaeza* at Persepolis and would become an enduring feature of later Persianate gardens. The so-called *Persepolis Fortification Tablets* excavated in the walls of Persepolis contain further evidence that

⁵⁷ Xenophon. *Anabasis*, trans. and ed. Carleton L. Brownson, 7 books, Cambridge, MA: Harvard University Press, 1922, i: sections 2, 7 and i: sections 4, 9-11.

⁵⁸ Xenophon. *Hellenica*, trans. and ed. Carleton L. Brownson, 7 books, Cambridge, MA: Harvard University Press, 1918-21, iv: sections 1, 15-16.

⁵⁹ Xenophon. *Cyropaedia*, trans. Walter Miller, Cambridge MA: Loeb Classical Library, 1994, viii: sections 6, 12.

⁶⁰ Xenophon. *Oeconomicus*, trans. E. C. Marchant, Loeb Classical Library, Cambridge MA: Harvard University Press, 1959, iv: sections 8, 12-14, 20-25

⁶¹ Xenophon. *Cynegeticus*, trans. H. G. Dakyns, London: Macmillan & Co., 1897, v: section 5

⁶² *Ibid.*, v: section 34.

⁶³ Xenophon. *Oeconomicus*, iv: sections 20-23.

pairidaezas grew and stored agricultural products such as grains, dates, figs and fruits.⁶⁴ These ancient Mesopotamian and Persian models thus indicate that there were several components to the form and function of hunting parks which included forests, formal gardens with pavilions and other imperial buildings, extensively irrigated cultivated spaces that grew a variety of crops, and storage facilities for crops. References by Xenophon and later classical writers who mention that game animals grazed among trees imply that paradises were large enough for the king to enjoy the chase.

Long considered the ideological restorers of the influential Achaemenid Empire, the Sassanians (224-651 CE) adopted the *pairidaeza* and its enshrined ideals and continued to maintain them as large hunting parks.⁶⁵ A succession of Sassanian kings fashioned a substantial *pairidaeza* at Taq-i Bustan in Kermanshah. According to Iranologist Ernst Herzfeld, an artificial lake was the ‘main beauty’ of this vast hunting preserve and that Shahpur II (r. 309-379 CE) had a grotto built beside the spring to serve as an imperial hunting lodge.⁶⁶ Khusrau II (r. 591-628 CE) extended and developed the hunting park further and hectares of gardens stood beneath a line of craggy hills. Most of the cultivated area of the *pairidaeza* has disappeared but two grottos carved on the steep rock are extant and consist of various chase scenes. Although the bas-reliefs do not reveal the typology of the *pairidaeza* they show details of a royal hunt the likes of which may have taken place here. As seen in Figure 1, interestingly one panel shows an enclosure created by huge cloth panels which are staked and tied to regularly spaced trees while elephants, presumably trained, drive wild boar towards the imperial hunter, while other huntsmen assist and a group of musicians entertain the royal hunting party.⁶⁷ This is probably one of earliest visual depictions of a *qamargha*.

Figure 1. Sassanian bas-relief at Taq-i Bustan showing a hunting scene, possibly a qamargha.

⁶⁴ *Persepolis Fortification Tablets*, trans. Hallock, Richard T., Chicago: University of Chicago Press, vol. 92, 1969, 15, 113-6.

⁶⁵ Allsen, 2006, 37. See also Moynihan, 1980, 30.

⁶⁶ Herzfeld, Ernst. 1941. *Iran in the Ancient Near East*, London: Oxford University Press, 326-327.

⁶⁷ All descriptions of the carved reliefs of Taq-i Bustan from Moynihan, 1980, 35.

Ph. Gignoux also observes that irrigation was an essential element in Sassanian *pairidaezas* which suggest that the grounds were simultaneously used for cultivation and as an animal preserve. The geometric ordering of the spaces influenced by cosmological schema further indicate the sacral functions of the king as the hunter-cultivator.⁶⁸ However he suggests there was a physical demarcation in the landscape of the paradise – one part given to the chase, and the other for pavilions, waterways and agricultural lands which are separated by walls and towers.⁶⁹ The implication here is that the Sassanian *pairidaeza* modelled after its Achaemenid counterpart was a complex organisation comprising animal preserves, formal gardens, irrigation and canal systems, agricultural lands, orchards, forests, and imperial buildings.

The Persian *Chaharbagh*

Figure 2: Site plan of Qasr-i Shirin showing enclosing walls of the pairidaeza. Another wall within the pairidaeza enclosed the Imarat-i Khusrau palace and garden. Built by Khusrau II Parviz (591-628 CE).

The remains of the Imarat-i Khusrau at Qasr-i Shirin *pairidaeza*, also built by Khusrau II indicate how the Abbasids (750-1258 CE), the Muslim conquerors and successors of the Sassanians may have transformed the *pairidaeza* concept into the Quranic paradise garden. As seen in Figure 2, Pinder-Wilson describes the palace as standing on a high terrace in the middle of a great *pairidaeza* enclosed by a wall. Another wall within the *pairidaeza* enclosed the palace and formal garden.⁷⁰ It is therefore logical to assume that this internal enclosure consisting of symmetrical plots and irrigation channels evolved into the *chaharbagh*.⁷¹ At its strictest interpretation and in its ideal form, the *chaharbagh* consists of a square garden plot divided into four equal parts by cross-axial paved walkways (*khiyaban*) which often contain sunken water channels (*nahr*). The centre was usually occupied by a building such as a pavilion (*imarat*) or by a pool (*hauz*). This

⁶⁸ Gignoux, Ph. 1983. 'La Chasse dans L'Iran Sasanide' in *Iranian Studies*, Gherardo Groli (ed.), *Orientalia Romana* 5, Rome: Istituto Italiano per il Medio ed Estremo Oriente, 104.

⁶⁹ *Ibid.*, 1983, 104-105.

⁷⁰ Pinder-Wilson, 1976, 72.

⁷¹ See also Parpia, Shaha. 2013. 'The Chaharbaghs of Mughal Padishah Babur: A reflection of paradise or political connotation of power?'. Unpublished Masters dissertation, SOAS, University of London.

highly structured geometric scheme was functional, and had powerful symbolic connotations of the Islamic paradise. It also seems to have suited the urban Abbasids to select this particular aspect of the *pairidaeza* to mould into an earthly Quranic paradise, as it required relatively less land area in urban situations. Indeed, the plan of the two earliest Abbasid gardens (*bustan*) in Samarra built by the Caliph al-Mu'tasim (r.833-842), the Jawsaq al-Khaqani and Bulkawara both incorporated the quadripartite layout as an integral part of the space.⁷² The Jawsaq palace spanned over four hundred acres of which 172 were gardens.⁷³ As seen in Figure 3, the Bulkawara palace, sited on the banks of the Tigris, consisted of a prominent central axis punctuated by a series of monumental gates and courts arranged as quadripartite *chaharbaghs*; the third and fourth gates were arranged as triple *iwans* (vaulted niche or portal), and the cruciform throne complex had another large triple *iwans* facing the Tigris as well as a large *chaharbagh*.⁷⁴ John Hoag also notes that the *iwans* covered in mosaics featuring vine tendrils and the *chaharbagh* layout are symbolic of the paradise motif and intentional.⁷⁵

Figure 3: Bulkawara Palace, Samarra, 849-59 – chaharbagh layouts.

The word *bagh* which was widespread in Central Asia came into common usage in the Persianate lands after the Seljuq (1037-1194) conquests in the 11th century to denote an entity comprising palace and garden.⁷⁶ The word *chaharbagh* is possibly first seen in the writings of the Samanid historian Narshakhi in 943-44, the *Tarikh-i Bukhara*, describing the gardens of Amir Nuh Nasr in Bukhara to indicate a very large garden adjoining a substantial palace complex.⁷⁷ The etymology of these terms is discussed at length in Chapter 2.

⁷² The Persian word *bustan* was adopted by the Arabs to denote a Persian style of formal garden with canals and pools. See Pinder-Wilson, 1976, 74.

⁷³ Moynihan, 1980, 40. See also Pinder-Wilson, 1976, 74 for details of the layout of the Jawsaq gardens.

⁷⁴ Hoag, John, D. 1975. *Islamic Architecture*, Milan: Electa Editrice, 28.

⁷⁵ *Ibid.*, 28.

⁷⁶ Pinder-Wilson, 1976, 75; Moynihan, 1980, 49.

⁷⁷ al-Nashakhi, *Tarikh-i Bukhara, The History of Bukhara*, trans. R. Frye, 27. However, Pinder-Wilson disputes Frye's translation of *chahar baghha-yi khush* as 'four lovely gardens'. See Pinder-Wilson, 1976, 80-81.

The canonical plan of the *chaharbagh*, long considered as being quintessentially Islamic and having roots in the Achaemenid-Persian traditions has been confirmed by scholars starting from Petrus Bedik in 1678.⁷⁸ Based on his excavations at Pasargadae in the 1960s, Stronach notes that the royal garden contained a rectangular garden bed opposite the throne palace and stone water channels lined three sides of the garden bed and on the axis of sight which ran from the throne room through the middle of the garden as seen in Figure 4. While Stronach is of the opinion that the space was divided cross-axially, other scholars opine that the quadripartite plan is conjectural and note that the plan seen in Figure 5 is more plausible.⁷⁹

Figure 4: Pasargadae: Royal gardens, palace of Cyrus, reconstruction of purported cross-axial plan based on Stronach's study

Figure 5: Alternate reconstruction of the plan of Pasargadae.

But as Ruggles suggests, 'whether or not incised channels apportioned the space into equal quadrants, it is quite clear that sightlines could establish visual axes that implied a four-part geometry'.⁸⁰ Whether inspired by the ideological consideration of the Quranic garden of Paradise specifically described as a space divided into four gardens by the legendary rivers, or by practical concerns such as irrigation, the quadripartite model with water channels and walkways became the blueprint for the formal Islamic garden from the 8th century onwards. It is important to note that while the Sassanians set their *pairidaezas* in a rural setting, the Abbasids and their court were urban dwellers and their palace gardens were set in urban landscapes. This could be the reason why the function of the gardens gradually evolved into sedentary retreats.

⁷⁸ Cited in Alemi, Mahavesh. 1997. 'The Royal Gardens of the Safavid Period: Types and Models' in *Gardens in the Time of the Great Muslim Empires*, Attilio Petruccioli (ed.), Leiden: Brill, 72.

⁷⁹ See for instance, Parodi, Laura. 2011. 'Chaharbaghs, Palaces and Mughal Court routine in the Sixteenth Century'. <http://agakhan.fas.harvard.edu/icb/icb.do>

⁸⁰ Ruggles, 2008, 40

Early Islamic Hunting Practices

Early Caliphs, like their Persian Sassanian precursors continued to hunt as a royal past time, built hunting lodges and palaces, and created extensive hunting parks. This model became absorbed into Islamic culture.⁸¹ According to Shaked, the early Muslim kings adopted and adapted the main symbols of royalty and power from the Sassanians,⁸² and this included the culture of establishing and maintaining substantial hunting parks. The Umayyads built hunting retreats such as Qusair ‘Amra (early 8th century) and Khirbat al-Mafjar c. 740 in the deserts of Jordan whose interiors were covered in wall paintings and floor mosaics depicting hunting scenes (see Figure 6). As the theme of the floor mosaics in Khirbat indicate, the hunt was already established as a powerful allegory of the caliph able to provide justice and punishment in equal measure.⁸³

Figure 6: Khirbat al-Mafjar floor mosaic, Umayyad, c.740.

The mediaeval Jewish traveller Benjamin of Tudela who visited the Abbasid court in Baghdad during the reign of Caliph al-Mustanjid (r. 1170-80) notes that the palace and gardens were ‘three miles in extent, wherein is a great park with all varieties of trees, fruit-bearing and otherwise, and all manner of animals. The whole is surrounded by a wall, and in the park there is a lake whose waters are fed by the river Hiddekel. Whenever the king desires to indulge in recreation and to rejoice and feast, his servants catch all manner of birds, game and fish, and he goes to his palace with his counsellors and princes. There the great king Al Abbasi the Caliph (Hafiz) holds his court ...’⁸⁴

In Central Asia and Afghanistan, prior to the Mongol conquests, monumental hunting parks were established. The aforementioned Nashakhi describes at length in his *Tarikh-i Bukhara* the gardens of ‘surpassing beauty’ in the newly built town of Shamsabad, Bukhara, by the Samanid king Shams al-Din al-Mulk, adjoining which he built a meadow for the imperial horses. The meadow called Ghuruq (or *quruq*) was enclosed by walls the ‘flight of an arrow’ long and very high so no animal could escape.

⁸¹ Moynihan, 1980, 41.

⁸² Shaked, Shaul. 1986. ‘From Iran to Islam: On some symbols of royalty’, *Jerusalem Studies in Arabic and Islam*, 7.

⁸³ Hillenbrand, Robert. 1999, *Islamic Art and Architecture*, London: Thames and Hudson, 30-32.

⁸⁴ Benjamin of Tudela. *The Itinerary of Benjamin of Tudela*, trans. Marcus Nathan Adler, London: Henry Frowde Oxford University Press, 1907, 35.

In it Shams al-Din built a castle. Wild animals such as antelope, deer, foxes and wild boar were also kept in this Ghuruq. Several imperial buildings were accreted in Shamsabad.⁸⁵ According to Chagatay and Mongol writings, *quruqs* were widespread throughout Central Asia. They were extensive protected pasturelands, grainfields, hunting grounds and imperial burial sites.⁸⁶ Timurid writings also mention that *quruq* hunting grounds and hunting lodges were set in or next to substantial *chaharbagh* garden complexes.⁸⁷

Another impressive game preserve was built by the Ghurid (1100-1215) king Ghiyath al-Din (*r.* 1163-1203) at Zamindawar in Afghanistan and is explained at length by Qazi Minhaj-i Siraj Juzjani in the *Tabaqat-i Nasiri*.⁸⁸ It extended from his capital Firoz-koh in the mountains of the upper reaches of the Hari Rud (Herat River) to his winter capital Zamindawar in the valley of the Hilmand River, a distance of 40 *farsang* (leagues) and remained the exclusive hunting domain of the king. This seems to have been a single *shikargah* covering diverse ecologies namely plains, hills, forests and riverine marshlands. The gardens in Zamindawar, covered in juniper and pine, herbs and shrubs were extensive and beyond compare that they were named the Garden of Iram; immediately adjoining the gardens a plain corresponding in dimensions to the garden was cleared for the purposes of the chase. The magnitude of the hunt and hunting ground is demonstrated by the fact that once a year, for a distance of 50 or 60 *parasang* (~ 360 km), a *nargah* or semi-circle of huntsmen were drawn out and over 10,000 wild animals would be driven into the hunting plain which was cleared of major vegetation for the convenience of the king and his guests; it took over a month for the two extremities of the hunting circle to close up. The king, followed later by his nobles and servants of the court took turns hunting in the Sultan's sight. Juzjani's descriptions indicate the magnitude of the hunt, hunting techniques, certain features of the *shikargah* and its spatial links to the landscaped gardens.

⁸⁵ Abu Bakr al-Narshakhi. *The History of Bukhara. Translated from a Persian Abridgment of the Arabic Original by Narshakhi*, trans. Richard N Frye, Cambridge, Mass.: The Mediaeval Academy of America, 1954, 29. The typology of the *quruq* is explained at length in Chapter 2.

⁸⁶ DeWeese, Devin. 1994, *Islamization and Native Religion in the Golden Horde, Baba Tükles and Conversion to Islam in Historical and Epic Tradition*, Pennsylvania: Pennsylvania State University Press, 181-2.

⁸⁷ McChesney, 1997, 103. The practice of setting *quruqs* in *chaharbagh* settings is discussed in Chapter 2.

⁸⁸ Juzjani, Qazi Minhaj-i Siraj. *Tabaqat-i Nasiri*, trans. Major H G Raverty from the British Museum MS Add. 26,189, London: Gilbert and Rivington, 1873, 386.

With the passage of time, the general trend was that Persianate gardens largely became centres of retreat and pleasure. While the Achaemenid *pairidaeza* had spaces for the hunt and garden, the metaphorical pull of the powerful Quranic connotation contained in the formal *chaharbagh* layout meant that the garden became largely passive in function and served as palace gardens or in funerary contexts. As Moynihan rightly notes: ‘Except for the hunting parks, it seems the Persians continued their sedentary use of the gardens.’⁸⁹ And the hunting ground became just that, a space to hunt. What is important to note here is that the chase, while being a common feature of the *pariridaeza*, was by no means its only or even its dominant feature. Agriculture and horticulture, as discussed earlier, were equally important functions. Characteristic features such as running water in water channels, water features such as fountains and sheets of water all lent themselves to gardens becoming places for repose and reflection.

Chinghisid and Timurid Hunting Practices

The Mongol conquests of the Persianate lands, however, changed the function and typology of the garden space. The Ilkhans (1206-1353), followed by the Timurids (1369-1500) in keeping with their nomadic traditions expanded the use, form and features of the geometrically laid conventional and idealised garden design into spaces for royal encampments and agricultural orchards of fruit trees and vineyards. They integrated the features of the *pairidaeza* hunting parks with the formal design of the Perso-Islamic palace gardens (*bagh*), planted it with ground cover such as clover with spaces for encampments, tents and awnings for imperial and military use and sited these huge *chaharbaghs* outside but in the vicinity of the city. The gardens laid out for the Ilkhan of the Golden Horde Ghazan Khan at Ujan near Tabriz is described at length by his vizier Rashid al-Din, and took a team of engineers and skilled craftsmen three years to build. It consisted of a large meadow with tanks and cisterns and tree-lined avenues at the centre of which stood the Golden Pavilion (*khargah*), the Golden Throne and other imperial buildings.⁹⁰ As Pinder-Wilson notes: ‘This type of garden [Rashid al-Din uses the word *bagh*] was evidently developed by the Mongols for a purpose peculiar to their own

⁸⁹ Moynihan, 1980, 49.

⁹⁰ Cited in Pinder-Wilson, 1976, 76-77.

traditions and usages. The assumption of royal power required a garden setting for the nomadic encampment, and the existing Persian *bagh* was adapted to the requirements of the Ilkhans.⁹¹

The hunting etiquette, practices and ideals of the hunt were firmly established by the Ilkhans and enshrined in the Chinghisid *yasa* or regulations which paid much emphasis on hunting as a means to keep the army alert and effective.⁹² The *yasa* became known as the *tura* in Timurid writings which was then inherited by the Mughals as the gold standard. ‘Ala-ad-Din Juvaini, the Governor of Baghdad in the court of the Mongol Ilkhan Hülegü notes in his monumental *Tarikh-i Jahan-gusha* that Chinghiz Khan considered hunting as a ‘proper occupation’ for the commanders of armies and that it was incumbent on warriors to learn to seek out the prey using scouts, and the techniques, formations and methods to surround and hunt the game. Hunting was a peacetime extension of warfare as it enabled training in the art of weaponry and endurance of hardships.⁹³ Juvaini also explains at length the administrative procedures and protocols involved when the Khan sets out to hunt, normally at the beginning of winter. Troops stationed in all the provinces were involved in the distribution of arms, taking into consideration the various terrains where the hunt would take place. The amirs were entrusted with organising hunting formations comprising the left wing, right wing and centre as the court and harem set out with provisions for meals for the entire party. Beaters began to drive the game into the hunting ring about three months before the commencement of the hunt and commanders were entrusted with keeping the game well within the *nerge* or *qamargha* ring, failing which resulted in a death penalty. The Khan and his retinue were ready to hunt when the circle had contracted to a diameter of two or three *parasangs* and the animals were ‘unable to stir’. A strict convention of who enters the ring after the imperials were satiated was also laid down. Occasionally, as happened during a hunt during the reign of Qa’an, animals were also let free, hence making the

⁹¹ Ibid., 1976, 77.

⁹² Ali, Mubarak. 1994. ‘The *Turah-i-Chingizi* at the Mughal Court’, *Lahore Museum Bulletin*, 4/1-2, 99-102.

⁹³ Juvaini, ‘Ala-ad-Din ‘Ata-Malik. *Tarikh-i Jahan gusha, The History of the World-Conqueror*, translated from the text of Mirza Muhammad Qazvini by John Andrew Boyle, vol. 1, Cambridge, MA.: Harvard University Press, 1958, 27.

hunt analogous to war in every detail,⁹⁴ that included releasing the occasional prisoner of war.

The Timurids firmly established the form, function and symbolism of the extended *chaharbaghs*. The hunting and gardening traditions enshrined in the *pairidaeza* concept were revitalised by the Timurids as vital institutions with which they could demonstrate power. The hunting codes initiated in the Chinghisid *yasa* was entrenched in the Timurid court as the *tura-i Chinghizi*. Aside from a host of rules, protocol and guidance provided for matters of distribution of war booty, taxation laws, social positions and status at court and laws of inheritance, the *tura* also provided detailed rules regulating the hunt and hunting etiquette which were followed in the Mughal court. These details are explained by one of the Timurid historians at court, Ahmad ibn Arabshah in the *Aja'ib al-Maqdur fi Nawa'ib al-Taymur* or *The Wonders of Destiny in the History of Timur*.⁹⁵ The *qamargha* as the emperor's prerogative, maintenance of army formations at hunts namely right wing, left wing and centre, methods of driving in quarry, the order of grandees and soldiers entering the *qamargha* ring after the emperor had had his fill, and seating arrangement at encampments were all determined by the *tura*. Arabshah notes that the Khan's armies and advance parties were recruited to drive in the game that extended over large tracts of hills, valleys and deserts, with orders that they were not to kill any animal personally. The armies also roped in travellers in the region as beaters to drive the game into the plains until the hunting circle 'became like a compact fabric'.⁹⁶

Ancient Indian Hunting Culture

Ancient Indian writings also suggest robust hunting practices at court. The *Arthashastra* (science of royal government), written by Kautilya, the chief minister of Chandragupta Maurya (*r.* 324-300 BCE), and dates in its present form from around the second century BCE and the third century CE, advocates that the hunt and the hunting ground were significant as: economic resources to the state (trade in forest produce); protection of the elephant considered the ultimate war machine; a forest of wild animals had protective

⁹⁴ Juvaini, *Tarikh-i Jahan gusha*, 28-30. (One *parasang* ~ 10 km).

⁹⁵ Arabshah, Ahmad ibn. *Tamerlane or Timur the Great Amir*, trans. J. H. Sanders, London: Luzac & Co., 1936, 308-309. See also Ali, M., 1994, 99-102.

⁹⁶ Arabshah, *Timur*, 308.

features and was a natural deterrent when adjoining the territories of enemies; and the hunting park, a dry but irrigated agricultural space filled with animals with claws and teeth removed, should border an animal filled forest and serve the king's recreation needs.⁹⁷ Kalidasa, another Classical Indian poet (4th – 5th century) in the Gupta court also mentions hunting as a training for battle, and that hunting was the ultimate imperial activity truly worthy for a king.⁹⁸ Other ancient Indian texts such as the *Dharmashastra* (legal codes) and the *Sushruta-samhita* (c. 600 B.C.) of the physician Sushruta, also distinguish between different types of forests and the significance of dry (*jangala*) and wet (*anupa*) lands. *Jangala* or dry land was highly recommended for cultivation and settlement; its dominant geographical feature was that it represented an expansion of agriculture in the irrigated plains seen as 'uncultivated but available', surrounded by cultivated land, and includes the village world. This was gazelle territory and provided excellent hunting opportunities for the kings. *Anupa* or marshy, mountainous, forested land receives less rainfall than the *jangala* and was elephant territory.⁹⁹ Forests and hunting grounds formed a protective belt to agricultural villages. The *Manasollasa*, another Indian text written in Sanskrit by the Chalukya king Somesvara III in the 12th century mentions the hunt as a purely recreational imperial activity. He details over thirty-one hunting techniques which would take place in a created hunting reserve at least 8 miles (*one yojana*) in length in a forest full of fruit and flower-bearing trees, lakes filled with fish and free of fierce animals.¹⁰⁰ The hunting techniques mentioned in the *Manasollasa* imply that hunting had become an elaborate and important imperial activity at court.

⁹⁷ Kautilya, *The Kautilya Arthashastra*, II, trans. R P Kangle. Delhi: Motilal Banarsidass, 1969, reprint 2014, 59-60.

⁹⁸ Cited in Divyabhanusinh. 1995. *The End of a Trail: The Cheetah in India*. New Delhi: Banyan Books, 29. The *Manasollasa* also mentions this. See Somesvara III, *Manasollasa of King Somesvara*, trans. and ed. Gajanan K. Shrigondekar, 2 vols, Baroda: Oriental Institute, 1939, 42.

⁹⁹ Cited in Zimmermann, Francis. 1999. *The Jungle and the Aroma of Meats: An Ecological Theme in Hindu Medicine*. Delhi: Motilal Banarsidas, 48-50, 19, 38. The significance of *jangala* and *anupa* are discussed at length in Chapter 3.

¹⁰⁰ Somesvara III, *Manasollasa*, 42-48.

Ghurid and Sultanate Hunting Practices in India

The earliest Muslim rulers of India were the Ghurids of Afghanistan who invaded northern India in 1192. The aforementioned Ghurid historian Qazi Minhaj-i Siraj Juzjani continues to chronicle the hunting exploits of the Indian Ghurids in the *Tabaqat-i Nasiri* and notes their use of similar hunting techniques such as coursing with cheetahs, and hunting with elephants and birds of prey. The *shikargah* was also a place of political intrigue where rivals to the throne could be potentially eliminated.¹⁰¹ While high-ranking officials were in charge of cheetahs and elephants, and their use in hunts and war, Juzjani is strangely silent on methods to capture these animals. Firishta (c.1570-1611), a court chronicler in the employ of the Bijapur Sultans of the Deccan notes in the *Tarikh-i Firishta* that hunts used as pretexts to move vast encampments of soldiers for war was already a common practice in the Sultanate (1206-1450) dynasty who became freed of their Ghurid suzerainty by 1206.¹⁰² Juzjani's writings also reveal that gardens constructed by the Ghurids in India were the focus of power and sovereignty. During the reign of Sultan Nasir al-Din Mahmud Shah (r. 1246-66), he notes that the armies encamped in the suburbs of Delhi between the Bagh-i Jud, and Gilu-khari (Kilugari) and the city.¹⁰³ (See map in Figure 7).

Figure 7: Conjectural site plan showing the gardens, bund, hauz and shikargahs of Delhi under the Sultanates. Shikargahs and hunting mahal are shown in green. Blue lines indicate waterworks mentioned in the text. Adapted from Welch, 1996, 62.

Kilugari was a popular hunting preserve at the time. Juzjani also mentions that gardens built around the large reservoir, the Hauz-i Rani, extended from the Bagh-i Jud, and that it was the setting where Sultan Ulugh Khan consolidated his power with all the amirs and maliks.¹⁰⁴ Incidentally the site of the Sayyid and Lodi tombs which adjoins the Bagh-i Jud were fertile hunting grounds for the Sultanate and later Mughal kings. Firishta also

¹⁰¹ Juzjani, *Tabaqat-i Nasiri*, 576-77. Juzjani notes that a high ranking noble Ali-i Mardan Khalji, whose son would later found the Khalji Sultanate dynasty once plotted with Sultan Taj-ud-Din to have the Ghurid Sultan Qutb-al Din Aybak killed whilst hunting in the *shikargah* but the plan did not materialise.

¹⁰² Firishta, *Tarikh-i Firishta*, vol.1, 146, 172, 176, 259, 292.

¹⁰³ Juzjani, *Tabaqat-i Nasiri*, 709

¹⁰⁴ Juzjani, *Tabaqat-i Nasiri*, 854. The magnificent garments worn by the many amirs supposedly transformed the entire area between the Bagh-i Jud and the Hauz-i Rani into a thousand *gulistans* (flower gardens).

notes that the plains of Hauz-i Rani were hunting grounds for the Ghurid Sultans of Delhi.¹⁰⁵ Hence the Mughal traditions of encamping at gardens, and hunting at these designated garden sites were already set in motion during the Sultanate reign.

The Sultanate emperors were prolific water engineers and architects.¹⁰⁶ During the reign of Alauddin Khalji (r.1296-1316), concerted efforts were made to develop and extend agricultural prosperity through artificial irrigation thereby enhancing cultivation in arid lands. These consist of large bodies of water such as *bunds* (lakes or dams), *hauz* (large tanks or reservoirs) and stepwells called *ba'oli* which used gearing devices for lifting water; and an extensive network of channels constructed by damming and diverting rivers. Alauddin Khalji embarked on ambitious building projects including the civil engineering works and excavated several reservoirs such as the Hauz-i Khas; he built and restored several *ba'olis* (see Figure 8) and constructed numerous gardens in the royal city of Siri.¹⁰⁷



Figure 8: Rajon ki Baoli stepped well built in the Lodi era (c.1506) in Mehrauli, Delhi.

¹⁰⁵ Firishta, *Tarikh-i Firishta*, 127

¹⁰⁶ See Siddiqui, Iqtidar Husain. 1986. 'Water works and irrigation in India during pre-Mughal times'. *Journal of the Economic and Social History of the Orient* 29/1.

¹⁰⁷ Several successive dynasties founded cities in the immediate vicinity of Delhi. These include Lal Kot (c.1052), Qila Rai Pithora (c.1180), Siri (Ala-al-Din Khalji c.1303), Tughlaqabad (Ghiyas al-Din Tughlaq c.1321), Jahanpanah (Muhammad ibn Tughlaq c.1325), Firuzabad (Firuz Shah Tughlaq c.1354), Din Panah (Humayun c.1533), Shergah (Sher Shah Sur c. 1540), Shahjahanabad (Shahjahan 1639), New Delhi (Lord Hardinge 1911). Above details from Blake, Stephen. 1991. *Shahjahanabad: The Sovereign City in Mughal India 1639-1739*. Cambridge: Cambridge University Press, 7.

It is important to note here that the collection and harnessing of rainwater to counter the vagaries of monsoons by building lakes and reservoirs is an ancient Indian practice. The Sudarshana Lake in Saurashtra, for instance, was a substantial irrigation reservoir created by a dam built during the reign of Chandragupta Maurya (r.321-297 BCE) to control flood waters. According to the Junagadh epigraphic evidence written during the reign of the Satavahana king Rudradaman I (r.130-150), during the reign of Ashoka, ‘it was embellished with embankments’; conduits were also constructed. Rudradaman also repaired the dam.¹⁰⁸ Hence the Sultanate emperors inherited several cisterns, wells, tanks, stepwells and reservoirs from their ancient Buddhist and Hindu predecessors.



Figure 9: Satpula Dam, c.1340, south wall of Jahanpanah, Delhi

However, it was during the reign of the Tughlaqs that Sultanate architecture and hydraulic engineering works thrived. The first Tughlaq sultan Ghiyath al-Din (r.1320-25) started the construction of a series of complex *bunds* to catch rainwater around the citadel of Tughlaqabad in south Delhi. The Satpula was an impressive seven-arched dam and sluice which was over 78 meters long (Figure 9). It was also part of the defence walls of Jahanpanah, and was one of the more ambitious Sultanate waterworks. Sultan Firuz Shah’s (r.1351-88) reign was marked by numerous civil engineering works. According to

¹⁰⁸ Burgess, James. 1971. *Kathiawad and Kachh, being the Result of the Second Season’s Operations of the Archaeological Survey of Western India*, Varanasi: Indological Book House, 128-129.

Firishta, Firuz Shah also built fifty dams, thirty reservoirs, ten public wells and several aqueducts and channels to promote agriculture.¹⁰⁹ Firuz Shah's court historian Shams-i Siraj 'Afif notes that the *bund* in the newly built fort-city of Hissar Firuza, originally built as an outlet to discharge the water during excavations for the fort, as being deep and outstanding beyond compare.¹¹⁰

According to another court historian Zia-ud-Din Barani, Sultan Firuz Shah had an excessive fondness for hunting which he considered a kingly practice and is 'counted among the characteristics of the great kings.'¹¹¹ *Bunds* were also watering holes that attracted game in large numbers.¹¹² Consequently, a number of *shikargahs* and related buildings such as hunting palaces were built around these water bodies. The hunting palace of Firuz Shah known as the Kushk-i Jahannuma or the Kushk-i Shikar was built in the area of Delhi's Northern Ridge adjoining a *bund*, and its construction was personally overseen by Sultan Firuz. The *bund* was built to collect rainwater from the surrounding hills and traces can still be seen.¹¹³ It served as an imperial residence and second in importance only to the impressive palace called the Kushk-i Firuz Shah situated in the sprawling complex of the Firuz Shah Kotla built in the newly built town of Firuzabad. This is attested by the fact that one of the sandstone monolith pillars first erected as a Buddhist monument by the Mauryan king Ashoka (r. c.268-232 BCE) was moved from Mirat (Meerat) to Delhi, a distance of over 85 km, at considerable cost and effort, and re-erected on a specially commissioned hill in the Kushk-i Shikar.¹¹⁴ 'Afif notes that after the erection of the pillar, a large town sprang up in the vicinity, and that in the area between the hunting palace and city of Firuzabad, a distance of 5 *kos* (~20 km), over eighteen villages sprang up.¹¹⁵ Nothing remains of the palace and the mansions built by nobles except a dilapidated two-storied building accessed by stairs consisting of several rooms and now called Pir Ghaib. Its name indicates that it was used by a Sufi saint

¹⁰⁹ Firishta, *Tarikh-i Firishta*, 269-70.

¹¹⁰ 'Afif, Shams-i Siraj. *Tarikh-i Firoz Shahi*, in *The History of India as Told by its own Historians*, H. M. Elliot and J. Dowson trans. and eds.. London, Trubner & Co., 1871, 354, 299.

¹¹¹ Barani, Zia-ud-Din. *Tarikh-i Firoz Shahi*, trans. Ishtiyah Ahmad Zilli, Delhi: Primus Books, 2015, 367.

¹¹² Firishta, *Tarikh-i Firishta*, 269-70.

¹¹³ Ahmad, Sir Syed. *Athar u'l-Sanadid, Monuments of Delhi: Architectural & Historical*, trans R. Nath, Ajay Nath, New Delhi: Heritage, 1979, reprint 2010, 7.

¹¹⁴ See 'Afif, *Tarikh*, 353. The other obelisk was brought to the palace in the Firuz Shah Kotla.

¹¹⁵ *Ibid.*, 353, 303.

probably during Mughal times. The Ashoka pillar stands, now a considerable distance away from Pir Ghaib (see Figures 10 a and b).



Figure 10 a and b: Pillar in Kushk-i Shikar/Jahannuma, 1354(left); Pir Ghaib (right).

Four relatively small hunting *mahals*, or lodges, have also been attributed to Firuz Shah's patronage. These include:

- Kushk Mahal – a vaulted building made up of rooms on high ground. It supposedly stood within the confines of a *bund*, a smaller *hauz* and a hunting preserve. It is now within the Teen Murti Bhavan complex, the former residence of India's first prime minister in New Delhi. (Figure 11).



Figure 11: Kushk Mahal, c.1350s



Figure 12: Malcha Mahal, c.1360

- Malcha Mahal – an elaborate structure with vaults, pillars and arches in the Southern Ridge. Its *bund* and *hauz* have disappeared and it is surrounded by thick vegetation now. (Figure 12).



Figure 13: Bhuli Bhaktiyari, 1354

- Bhuli Bhaktiyari is another hunting *mahal* situated on the north of the Southern Ridge and adjoins a large *bund*, still intact. It is a large, walled area with an impressive portal and open interior. There are some low vaulted rooms at the back. The open area in the centre probably indicates that tents may have been pitched here during hunts in the area. (Figure 13).



Figure 14: Mahipalpur, c. 1350s, Delhi

- Mahipalpur Mahal – a vaulted structure consisting of a portal accessed by stairs and comprising low corner circular turrets and an impressive marble *mihrab*. According to Welch, the *bund* and sluice gate at Mahipalpur created a natural habitat for wildlife and provided ample hunting opportunities for Sultan Firuz who was as fascinated by hunting as he was by hydraulic engineering.¹¹⁶ (Figure 14).

Bunds, *hauz* and other Sultanate waterworks seem to have been created with multifarious functions. Game animals being attracted to artificially created water bodies was not incidental; rain-fed *bunds* complemented by water diverted from rivers promoted agriculture and supplied water to the populace, while the uncultivated lands near it sustained large animal populations, and provided the all-important vistas for the hunting palace where emperors could indulge in the chase.¹¹⁷ Hence the defining characteristics of the Mughal hunting such the siting of *shikargahs* close to water bodies, the proximity of *shikargahs* and wildlife to urban contexts, and the multifarious functions of *bunds* were already established and distinctive practices in Sultanate courts.

¹¹⁶ Welch, 1996, 74.

¹¹⁷ *Ibid.*, 92.

Figure 15: Map of Sultan Firuz Shah's Canal

The reign of Firuz Shah is particularly remarkable for the ambitious irrigation canal projects created to extend cultivation of largely dry, arid desert tracts. I have discussed Sultanate and Mughal irrigation works at length in Chapter 3. The Haryana tract, between the Yamuna and the Sutlej rivers is a vast area that is not served by any perennial river. 'Afif indicates that in 1355, Firuz dug two canals (*jui*), one from the Yamuna and the other from the Sutlej.¹¹⁸ They ran for 80-90 *kurohs* (~320- 360 km) to reach Hissar, from where they received supply from other streams and flowed past Safidun. He also notes that while previously only one *kharif* crop (autumn harvest) usually millet and rice was possible, with the creation of the canals, both the *kharif* and *rabi* crop (spring harvest) of a high-grade were cultivated.¹¹⁹ Barani is even more effusive in describing the magnitude of the canals and their benefits to cultivation and its effects on population growth.¹²⁰ Importantly irrigation canals resulted in an increase in wildlife to support Firuz's penchant for hunting. Hissar Firuza and Safidun were important *shikargahs* during the Sultanate era, and by the time of the Mughals they had become favoured *shikargah-i muqarrars*, and several more added alongside the canals.

It is interesting to note that when Babur first invaded India, his memoirs, the *Baburnama* are peppered with comments about his intense dislike of the local landscapes that contained no formal garden spaces and a lack of running waters (*aqar-sular*) other than rivers. He also notes that even when presented with an opportunity, the Indians do not dig channels to convey water or construct dams because crops are rain-grown implying they are not grown with irrigation.¹²¹ This comes after he claims he visited among other Sultanate architectural gems, the Hauz-Khas and Hauz-Shamsi immediately

¹¹⁸ 'Afif, *Tarikh*, 229-300. See also Habib, 1963, p.35 and Singh, A. 1992, 49.

¹¹⁹ 'Afif, *Tarikh*, 300.

¹²⁰ Barani, *Tarikh*, 348-49. He notes that the canals created by Firuz were made to flow in deserts and vast wastelands where no wildlife or domesticated animals could survive as the only vegetation here was wild gourd, acacia and thorny plants. The canals now brimmed with water which flowed 'like the Ganga and Jamuna rivers'. Previously itinerant people now put down permanent roots in the thousands of villages that sprang up around these canals sustained by cultivation of crops such as sugarcane, wheat and gram. Crops such as pomegranate, grapes, apples, melons, orange, mango previously seen as delicacies brought in by merchants from Delhi and consumed only on special occasions, became the norm after the construction of the irrigation canals. Cash crops such as the hundred petal rose (*rosa centifolia*) were also exported for sale in Delhi, and contributed to increases in the state treasury.

¹²¹ Babur, *Baburnama*, 486-87.

upon arrival in Delhi.¹²² For such an astute observer of the unusual and mundane, it is surprising that he fails to mention the Satpula dam and the Mahipalpur *bund* and sluice complex when he visited Tughlaqabad. Perhaps his viewpoint was still clouded by nostalgia of Central Asia where small structures diverted small mountain streams, not the monumental irrigation and other public works of the Sultanate kings. However, Babur's successors, especially Akbar and Jahangir, are respectful in acknowledging the true worth of Sultanate waterworks. Mughal emperors, from the time of Akbar onwards, renovated and updated older *bunds* and *hauz* and embarked on new building projects. They also restored several hunting palaces. Akbar's *sanad* (charter) issued in 1568 notes that Firuz's canal had become so choked that the waters had not flowed to Hissar Firuza in over a 100 years, and that agriculture had completely dried up.¹²³ Akbar ordered the canal, renamed Shaikhu-ni, de-silted, widened, deepened and extended. It ran past Karnal and Safidun and beyond to Hissar. In 1638, Shah-Jahan ordered a new canal called the Nahr-i Bihisht which effectively extended the Shaikhu-ni from Safidun running a further 90 kilometres to service his new city of Shahjahanabad.

Distinguishing elements of the Mughal hunting culture were largely inherited from a variety of sources including ancient Indian, Persian, Central Asian Chingisid, Timurid and later Sultanate predecessors. Staging of *qamarghas*; using the hunt as a pretext to move large numbers of soldiers near restive locations while retaining the element of surprise; the porous borders between the *shikargah*, forest and agricultural lands; hunting at designated garden sites; courtly and military encampments in *shikargahs*; and the multipurpose irrigation works that also attracted wildlife; and the building of hunting *mahals* at these sites with enhanced views and abundant game were all set in motion by earlier dynasties. The Mughals marshalled these disparate influences and traditions, adapted them to suit their requirements as Timurid heirs ruling over multi-ethno-cultural subjects, and refined these elements into a unified sophisticated hunting culture with a distinctive vocabulary and narrative.

¹²² Ibid., 475-76.

¹²³ Lieutenant Yule. 1846. 'A Canal Act of the Emperor Akbar with Some Notes and Remarks on the History of the Western Jumna Canal', *Journal of the Asiatic Society of Bengal*, Calcutta, 15, 214.

CHAPTER 1

Reordering Nature: Power Politics in the Mughal *Shikargah*

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Reordering Nature: Power Politics in the Mughal *Shikargah*

Abstract

The Mughal shikargah (hunting ground) defies conventional spatial and functional definitions. Although fragmentary, references to the imperial shikargah in Indo-Mughal literature, memoirs, biographies, gazetteers, and documents suggest that the typology of the shikargah cannot be reduced simply to one form of natural terrain; nor was hunting game its sole purpose. The shikargah was conceptualized to accommodate multifarious functions. Whether areas of wilderness or dedicated preserves, the spaces used for hunting were transformed into public arenas in which the emperors could enact the hunt. In addition, other alterations to the natural environment enabled the occurrence of courtly activities. As the stage for imperial ceremonials and for the meting out of justice, or as sites of encampment and halting during royal inspection tours, the shikargah was inextricably linked to the administration and bureaucracy of the Mughal Empire. The hunt was also a pretext to mobilize armies for reconnaissance and intimidation of restive provinces, during which the shikargah became a venue for military training and armed intervention. Using the framework of the hunt to interpret natural landscapes, this article aims to examine the physical and political processes of modification underlying the Mughal shikargah, those that carried with them semiotics of political power and control.

Keywords

Mughal
shikargah
landscape
transformations
political power
courtly functions
hunting park

Introduction

'The Great Mughals' (collectively r.1526–1707), as the first six emperors of the Mughal dynasty (1526–1858) were known, were prodigious hunters who traversed the vast, divergent landscapes of South Asia in pursuit of a variety of game. The emperors Babur, Humayun, Akbar, Jahangir, Shah Jahan, and Aurangzeb 'Alamgir saw the *shikar*, or hunt, as a princely prerogative through

which they could publicly demonstrate their dominance over nature. The *shikargah* (hunting ground) itself became a negotiated space within which they exhibited allegiance to their Timurid heritage and an ancient Persian legacy of hunting, both of which carried implications of political legitimacy. Using a variety of hunting techniques such as the *qamargha* (an enclosed battue hunt) and the decoy-drive hunt alongside tame cheetahs, hunting dogs, and birds of prey, the Mughals hunted game that included lions, tigers, antelopes, deer, nilgais, buffalo, boar, and fowl.¹ They also captured wild elephants and cheetahs, useful animals to employ in war and the hunt. Fragmentary yet telling references to the *shikargah* in Indo-Mughal historical literature, memoirs, biographies, gazetteers, and administrative documents indicate that it was conceived as more than just a hunting arena. This article aims to show that it was conceptualized as a fluid domain that accommodated a host of forms and functions. As an interactive space between the royal hunter and the diverse landscapes of the empire, the *shikargah* came to reflect, and to a certain extent shape, the political, social, and cultural life of the Mughal elite and the populace.

The creation and utilization of the Mughal *shikargah* involved processes of reordering nature. Whether hunting in the wilderness, which was usually rapidly modified after such an event, or within the confined environment of the hunting preserves, the Mughals undertook extensive landscape transformations that carried imposing political messages of power and prestige. As Allsen remarks, 'In pre-modern societies, the fashioning of artificial environments that differed markedly from their immediate surroundings was always an act of great ideological import.'² This is certainly true of the Mughal *shikargah*.

The Mughals ruled over a volatile population that often had to be subordinated. The suppressed groups included rivals to the throne from within the Mughal dynasty, non-Mughal Muslim kings (many of Afghan descent), Rajput chieftains, and a multi-religious populace. Reversing the policy of his predecessors, Akbar sought to incorporate defeated petty kings into the ruling hierarchy as officials of rank (*mansabdars*) in administrative and military service, where they often held high offices as governors (*subadars*), commandants, and revenue officials alongside Iranian and Turani (Turkic) nobles.³ For their part, such individuals had to establish ties of loyalty to the Mughal throne by a system of rituals that served to affirm the authority of the emperor. Issues of legitimacy and hierarchy were often addressed through hunting etiquette, with courtly ceremonials staged in the *shikargah* and encampment serving to reinforce the carefully cultivated image of the emperor as an 'embodiment of the empire'.⁴

This article shows how the hunting space underwent radical imperial intervention to create a public arena in which the emperor could perform the hunt, itself an act imbued with symbolic notions of kingship, authority, and control over nature, wildlife, and, by extension, humankind. As a stage for imperial ceremonials, trials, encampments, and halts, the *shikargah* was inextricably linked to the administration of the vast Mughal Empire. The hunt at times also served as a pretext for reconnaissance missions and the intimidation of restive provinces. In such instances, the *shikargah* became a space for military training and war games. Tactically organized hunting expeditions were the best means of moving troops without arousing suspicion, while spectacles of might involving tens of thousands of soldiers in the *shikargah* gave the emperor the opportunity to publicly display his ability to mobilize troops and resources, and to send overt signals to enemies of his readiness for combat. For instance, in 1567, when Akbar heard of the sedition of his

half-brother Mirza Hakim, he departed with his armies and regalia on a so-called hunting expedition towards Lahore. Mirza Hakim fled without resistance upon news of the advancing imperial hunting party;⁵ the subsequent *qamargha* staged in Lahore is discussed below. Such events prove the importance of the political framework for interpreting the Mughals' relationship to and use of the landscape.⁶

The Hunt and Political Legitimation

Using the hunt and hunting ground as instruments to justify imperial control over the natural world was an important aspect of political legitimation for the Mughals. Babur, who was a sixth-generation heir to the Timurid throne and related to Chinghiz Khan on his maternal side, laid great importance on his heritage. The *Tura-i Chingizi* – a set of Chinghisid regulations, social practices, and hunting codes – was frequently invoked at both the Timurid and Mughal courts.⁷ The Mughals' wholehearted embrace of the hunt and its political implications reaffirmed the continuation of their Central Asian heritage and the 'profound influence' of their Timurid legacy.⁸ In particular, lion hunting was seen as an imperial right throughout western Asia and further linked the Mughals to their illustrious forebears. Jahangir, hunting in Ajmer in 1623, noted, 'Since I am naturally fond of hunting lions, as long as lion hunting is possible I don't bother with any other kind.'⁹ Bernier, a French physician who visited the Mughal court from 1658 to 1669, remarked that 'the hunting of lions is not only the most perilous, but is peculiarly royal'.¹⁰

The image of Prince Khurram, the future emperor Shah Jahan, rescuing the Hindu courtier Anup Rai in 1610 from a lion by putting himself in a life-threatening position, is one of the most powerful political scenes in the Windsor *Padshahnama* [Figure 1].¹¹ Koch, who has written extensively on the *Padshahnama's* paintings, notes that this representation 'testifies to [Khurram's] ability to fulfil his kingly functions and retrospectively legitimizes the Prince as the rightful successor to the throne'.¹²

Successive Mughal emperors continued to refer to their Timurid patrimony and vision of kingship, itself inspired by Perso-Islamic and Turco-Mongol ideologies.¹³ Although cautioning against excessive hunting, literature in the Mirrors for Princes tradition, such as al-Ghazali's *Nasihah al-muluk*, counsels kings to balance their royal duties with relaxation and hunting in the manner of the mythical Persian hero Bahram Gur.¹⁴ Hence there are frequent comparisons to legendary Persian hunters in Mughal writings, and court paintings served to endorse this emulation. For example, Akbar's historian Abu'l-Fazl describes Humayun's *qamargha* hunt in Sultaniyya with the Safavid emperor Shah Tahmasp as 'Cyrus-like festivities' in the *Akbarnama*.¹⁵ It is interesting that Cyrus the Great (c.559–30 BCE), the founder of the Achaemenid Empire (550–330 BCE), was invoked in reference to a hunt between the rulers of two influential empires in early modern history. It is known through the extensive writings of the Greek mercenary Xenophon and archaeological remains of Cyrus's palace at Pasargadae that the *pairidaeza* (hunting park) was likely an enclosed, fortified space that included formal gardens, irrigated agricultural lands and orchards, protected forests, and game.¹⁶ The practices and ideals enshrined in Cyrus's *pairidaeza* were the inspiration for the hunting grounds and gardens of successive Islamic dynasties, including the Timurids and Mughals, who readily incorporated such features of the pre-Islamic Persian *pairidaeza*.¹⁷



Royal Collection Trust / © HM Queen Elizabeth II 2016.

Figure 1: Prince Khurram attacking a lion in Bari, late 1610. Painted by Balchand, c.1640, the Windsor Padshahnama, f.135b, RCIN 1005025.ae.

It is important to note that the layout, multifarious functions, hunting practices, and semiotics of the Mughal *shikargah* were based on pre-existing models. The Timurid hunting ground, itself based on Chinghisid practices, was a paradigm meant to be exported and emulated.¹⁸ Although much information is available on Timurid hunting practices, details about the topography and spatial layout of the *shikargah* are fragmentary.¹⁹ Babur mentions that Timurid royals often encamped in enclosed grain fields called *qurugh*s (*quruqs*), which also served as hunting preserves, and that Kan-i Gil in Samarqand was the

biggest and most prestigious *qurugh* in Transoxiana.²⁰ Chaghatai references note that imperial *qurughs* were enclosed, protected spaces that served as grazing grounds, royal burial sites, and hunting preserves.²¹ The Mughals adopted the idea of the Timurid hunting terrain and the traditions enacted therein, but adapted them to suit the wildlife, topography, and geographical conditions of India.

From the reign of Akbar onwards, 'the dynasty and the empire became indisputably Indian'.²² A composite nobility was created with the inclusion of Rajput nobles alongside Iranians and Turanians. Cultural and religious traditions of South and Central Asia thus merged, and the Mughals incorporated several Indian/Hindu rituals into their courtly customs, such as the *darshan*, or 'beholding' of the emperor.²³ Akbar established daily *darshans* where the emperor would ceremonially 'behold' and grant a viewing to nobles and the public through the *jharokha* balcony window.²⁴ It was just as significant that the public was able to behold the emperor and receive the divine light (*farr-i iza'at*) that emanated from his gaze during the enactment of the ritual, which became a vital aspect of the reaffirmation of kingship.²⁵

Despite the influence of Indian cultural practices at court, there is no direct evidence that earlier Indian annals, such as the twelfth-century Sanskrit work *Manasollasa* of the Chalukya king Somesvara III, could have influenced the Mughals.²⁶ It is nevertheless interesting that the *Manasollasa's* author recommends that

the king have a reserve forest full of beautiful trees without thorns laden with fruit and flowers and free from fierce animals. This reserve forest should not be far away from the capital. The forest may have lakes full of water and fish. It should be at least a *yojana* (8 miles) in length.²⁷

The *Manasollasa* details several deer-hunting methods, including the *dipamrgaja*, or the decoy-drive hunt, that used trained deer to lure wild deer. Abu'l-Fazl also mentions the *shikar-i ahu ba ahu* (hunting antelope with antelope) along with other hunting techniques in the *A'in-i Akbari*.²⁸ The Mughals also appropriated several Sultanate *shikargahs* such as Mahmudabad that brought them added prestige.²⁹ The Mughals thus seem to have successfully used aspects of their Timurid lineage to legitimize their rule in India. That this legacy was realized in part through the institution of the hunt imbued the Mughal *shikargah* with political overtones; similarities with ancient Indian hunting terrains and techniques gave the space added credibility.

The Deconstructed *Shikargah*: Hunt and Habitation

The typology of the *shikargah* remains elusive in Mughal chronicles; information regarding hunts, though abundant, usually alludes to acts of bravery and the bringing down of game. To define and elaborate on the Mughal *shikargah* as a physical space therefore requires a process of semiotic deconstruction.

Mughal sources note that the emperors hunted in a variety of *shikargahs*. In the absence of full descriptions and extant sites, the terminology associated with the hunting space is an important factor in attempting to recreate the layout of the *shikargah* and its dynamics. There are frequent references to the *shikargah* and to the emperors' going to the grounds for the *shikar* (hunt). The phrase *shikargah-i muqarrar* is used frequently to describe grounds that

were 'established', 'frequented', and 'favoured', and *khas shikar* is used occasionally to describe a 'special' hunting space. For example, Kanuda, near Delhi, is referred to as Shah Jahan's *khas shikar* in the *Ma'asir*.³⁰ Mughal sources also refer to favoured *shikargahs* as *manzil-gah* or *shikar-manzil*, meaning 'halting place', indicative of their dual function. For instance, the hunting grounds of Simawali, Samugarh, Dahra, Jalesar, Rupbas, Bari, Somauli, Alapur, Simawali, Bhatinda, Sunnam, and Bhatnir were all described as favoured *shikargahs* and *manzil-gahs* near Agra.³¹ In addition, walled hunting preserves are referred to as *rumna* in both Mughal writings and European travellers' accounts. For example, Mir Muhammad Khan, a high-ranking official in Aurangzeb's court, mentions hunting in the Karara *rumna* in Burhanpur,³² while Godfrey Mundy calls the 'Dil Koosha' (Dilkusha) *rumna* in Lucknow the 'King's park', in reference to the Nawab of Oudh. Mundy describes the park as 'a high grass jungle, surrounded by a wall, and intermixed with a few trees', adding that it 'is full of game of all kinds'.³³ Forbes writes that in 1742 he visited a *rumna* near Pune and that tents were pitched inside the grounds, which were home to large herds of deer and antelope. Although identifying the *rumna* as a park, Forbes notes that it 'is not enclosed, nor has it any kind of fence'.³⁴ Hence not all features of these hunting parks were universal, and as Mughal sources do not often provide exact details of their appearance, one can only make broad assumptions concerning the general characteristics of such preferred *shikargahs*.

Based on a variety of factors including the abundance of game, the presence of beautiful vistas, and the proximity to important trade routes and restive provinces, a particular tract of wilderness was selected for development into an imperial *shikargah*. Once this occurred, the typical procedures of alteration involved deforestation and/or reforestation, and the building of infrastructure such as pavilions, palaces, formal gardens, lakes, and reservoirs in order to develop the land into a *shikargah-i muqarrar*. Akbar's court historians Abu'l-Fazl and Khwaja Nizam al-Din mention that during Akbar's early forays into Gujarat to capture wild elephants in mid-1564, the forests around Narwar and Gwalior were still primeval.³⁵ The jungles were cleared of thick vegetation in order to set up elephant traps and to erect an ornate platform where Akbar held *darbar*, or court, as he watched the proceedings; Abu'l-Fazl writes that the arrival of the royal retinue had transformed the wilderness and dense jungles into 'a Cairo and a Baghdad'.³⁶ Events such as these, watched by tens of thousands of soldiers, courtiers, staff, and servants, presented an image of imperial power and enhanced the emperor's carefully cultivated public persona of authority. Landscape transformations were complete by the time Akbar revisited the site in February 1565, with Narwar becoming a frequented *shikargah* and Gwalior a halting place of 'exalted standards'.³⁷

Many of these environmental modifications were extensive and comprehensive and had powerful political significance, demonstrating that the emperor had the means and resources to reorder nature. For example, imperial newsletters, *akhbarats*, written during Aurangzeb's reign contain several reports of landowners and officials called in to help with *jangal-bari*, or jungle clearance, by laying paths, driving animals, and assisting in carrying camp baggage for the princes Azam and Bahadur during hunts.³⁸ During the same period, the *Nigarnama-i Munshi* of 1684 records that all small rivers from Delhi to Khizrabad were ordered to be blocked during an imperial hunting expedition.³⁹ Another example is Akbar's building of an artificial island on a deep freshwater lake near Srinagar, which included a palace and gardens, so that he

could shoot migratory ducks in comfortable surroundings.⁴⁰ These processes of landscape management meant that the hunting ground was no longer a 'natural' system unaffected by human influence.⁴¹

The role of such intervention was underscored by the public spectacle of the *qamargha* ring hunt, an exercise in the demonstration of ownership and control over vast tracts of land, resources, wildlife, and humans, and, as such, a largely political act. It involved extensive alterations to the natural landscape. A favoured hunting technique, it required animals driven in from distant locations into a substantial area fenced-off by branches (*shakhband*), canvas screens (*saraparda*), nets, or even human chains. Akbar's 1578 *qamargha* in Bhera involved animals driven in from Girjhak, a distance of 25 *kos* (approximately 100 kilometres).⁴² Hence modifications to the landscape extended even beyond the immediate hunting arena.

The aforementioned *qamargha* in Lahore in 1567 involved animals driven in by beaters from the neighbouring hills for over a month into a holding area just outside Lahore. Amirs from a vicinity of 160 kilometres in every direction were deployed to mobilize the hunt, and several provinces were sealed off to create a 16-kilometre circumference arena.⁴³ The painting depicting this particular *qamargha* [Figure 2] is referred to by Stronge as one of the finest



Victoria and Albert Museum, London.

Figure 2: Akbar hunts in a *qamargha* ring in Lahore in 1567. Left folio painted by Miskina with Mansur, c.1586, IS 2:56-1896; right folio painted by Sarwan, c.1586, IS 2:55-1896. From an Akbarnama manuscript.

hunting scenes in the Victoria and Albert Museum's *Akbarnama* manuscript, reflecting the greatest ever hunt held.⁴⁴ The 1567 *qamargha* no doubt came at a high social cost, involving disruptions to the lives of thousands of villagers and farmers whose lands were affected by the closure. However, the opportunity to document his control over nature, both wild and cultivated, in full view of his subjects was a valuable political act for Akbar.

Qamarghas were generally staged in one of the large *shikargah-i muqarrars*.⁴⁵ There were also instances of *qamarghas* staged in grazing grounds to capture, among other animals, wild elephants.⁴⁶ When Jahangir refers to the Arzina plain *shikargah* as being transformed into a *qamargha* (*shikargah-i dasht-i Arzina-ra qamargha namayad*), he makes an interesting comment that alludes to the fact that the term *qamargha* refers not only to a specific hunting technique, but also to a specially modified hunting space.⁴⁷ Although it is unclear what the transformation entailed, it probably meant the clearing of trees and scrub vegetation and the building of temporary pavilions in the centre of the ring.

The decoy-drive hunt, *shikar-i ahu ba ahu*, was easier to organize, less hazardous than lion hunts, and therefore more commonly used. As noted by Koch, it did not require as many resources as the *qamargha* and consequently found much favour with the royal princes, who were not entitled to stage a *qamargha*.⁴⁸ Due to the frequency of decoy-drive hunts occurring on royal tours, they might appear as seemingly informal and impromptu affairs. However, judging from Abu'l-Fazl's descriptions, these hunts were carefully organized, involving large numbers of personnel at various stages of the hunt.⁴⁹ The decoy-drive hunt also required other types of landscape reordering: a precise amount of forest needed to be cleared of trees, scrub, bushes, and groundcover so that the cattle and tame antelope used as decoys were highly visible, while other vegetation had to be created or left intact for the royal hunter and his huntsmen to conceal themselves as beaters drove the wild antelope or nilgais toward the waiting prince. In Figure 3, Prince Shah Shuja and his attendants, camouflaged in earth tones, hold branches and lie in wait for nilgais to be driven into the area using decoy animals within a hunting landscape that has been carefully cleared.⁵⁰



Erik Gould. Museum of Art, Rhode Island School of Design.

Figure 3: Prince Shah Shuja hunting nilgais in a decoy hunt. Painting attributed to Payag, c.1650–55, 58.068.

The process to turn the *shikargah* into a favoured, established, and frequented hunting ground and halting place also typically involved the construction and accretion of a variety of buildings and public works, and the creation of wells, reservoirs, tanks, artificial lakes, and formal gardens in order to alter the natural hunting environment to suit imperial requirements and expectations. In 1607, in the *shikargah-i muqarrar* of Jahangirpur/Jahangirabad, now known as Sheikhpura, near Lahore, Jahangir ordered the construction of a hunting tower, the Hiran Minar, dedicated to the memory of his favourite pet antelope.⁵¹ He also built the village of Jahangirpur and ordered a fort to be built there. Several infrastructure projects were soon added upon his orders to the *shikargah*: completed by 1620, the Hiran Minar complex includes a gateway, four corner pavilions, and an octagonal *baradari* pavilion at the end of a causeway in the middle of the large man-made reservoir, or *talab*.⁵² As the *talab* was watered by irrigation canals, it is likely that agricultural lands were in the immediate vicinity of the *shikargah*. Jahangir had thus completely refashioned the natural hunting environment in the Jahangirpur *shikargah*.

Mughal writings also indicate that the emperors preferred to hunt in modified hunting environments rather than the wilderness. Jahangir, referring to the Jahangirpur *shikargah* after its development through the addition of buildings, gardens, and reservoirs, wrote that 'now it is really an imperial hunting ground' (*al-haqq badshahana shikargah ast*).⁵³ In Duaba, he ordered a *qamargha* at the site of his encampment in the Safed Sang meadow, which he notes had great potential to be developed into a 'real place' (*ba-kayfiyyat ja'ast*).⁵⁴ That Jahangir was able to stage a *qamargha* in a meadow that also functioned as an encampment for his armies, and constructed infrastructure that gave the site a new imperial identity as a 'real place', speaks volumes about the political significance imbued in the *shikargah*. The symbolism was that of a successful emperor able to dominate nature, wildlife, and, ultimately, his subjects.

Shikargah-i muqarrars often involved game for the chase being driven in from elsewhere to complement existing stock. In Samugarh, over 400 antelope caught during a *qamargha* were transported to the Fatehpur preserves in 1611, and another 1500 captured in Rupbas were moved to Fatehpur in 1619.⁵⁵ The antelope were driven along specially constructed paths with canvas *saraparda* screens erected on both sides.⁵⁶ Non-native species were also introduced into *shikargah-i muqarrars*. For instance, red deer captured alive by Jahangir during a *qamargha* in Rohtas in 1607 were taken to 'Hindustan' for breeding.⁵⁷

Aside from the abundance of game, engaging vistas were an essential criterion for the site of a *shikargah*. If no picturesque setting was available but the site was deemed to have potential due to a profusion of game, then it was simply created. For example, the Karara *rumna*, Burhanpur, was situated by a lake. Lahori notes that while Shah Jahan was hunting there, he ordered a second dam to be built in front of an older dam dating from the Faruqi dynasty (1399–1601) on the River Tapti, described as 'a stream of unparalleled purity';⁵⁸ the construction of the second dam created a much larger lake and cascades. In addition, rows of buildings and gardens were created on both sides of the lake. These buildings included the Faruqi-era Shahi Qila Fort on one bank of the Tapti; this was completely restored by Shah Jahan, who added a palatial residence, hammam, mosque, and two audience halls. On the opposite bank of the Tapti was the garden mentioned in the *Ma'asir*, the Bagh-i Zaynabad, where an *ahukhana* (hunting pavilion) was built.⁵⁹ The Burhanpur *shikargah* also provides clear indication of the spatial relationship between the palace, pavilion, hunting ground, and garden. Such procedures, whereby the



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Figure 4: Shah Jahan hunting lions in Bagh-i Zaynabad shikargah, Burhanpur, 1630. Painting attributed to Daulat, c.1635, the Windsor Padshahnama, f.220b, RCIN 1005025.au.

emperor so conspicuously modified the original topography, demonstrated his power to dominate, control, and alter nature.

Shah Jahan hunted frequently in the Bagh-i Zaynabad, Burhanpur, a hunting garden that became a favoured site [Figure 4].⁶⁰ Mughal gardens and garden imagery were traditionally used as vehicles to express ideas of political power,



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Figure 5: A royal hunting procession, c.1635. Painting attributed to the 'Kashmiri Painter', c.1655, the Windsor Padshahnama, f.166b, RCIN 1005025.ai.

territoriality, and authority;⁶¹ to place the *shikargah* in a garden setting gave this symbolism added cogency. In fact, Mughal sources refer to many favoured *shikargahs* in the context of gardens.⁶² Hunting gardens highlight the spatial and cultural proximity of hunting and gardening throughout South and Central Asia in the early seventeenth century.⁶³ The *Bayaz-i khwushbu'i*, a seventeenth-century handbook for Mughal noblemen, mentions Dahra Bagh as a hunting garden where Mughal emperors encamped and hunted on numerous occasions, and which was frequented by Jahangir.⁶⁴ He also hunted regularly in the favoured Nur Chashma (Hafiz-Jamal) hunting garden near Ajmer.⁶⁵

Encampment in the *Shikargah*

The Mughals further honoured their Timurid legacy by adopting similar peripatetic lifestyles as they moved en masse with their court and bureaucracy between the imperial capitals of Agra, Delhi, and Lahore, and to the Kashmir Valley in the summer. Such extended tours were necessary in order to consolidate their authority over vast territories, intimidate unruly chieftains, and lead military campaigns. Blake estimates that between the years 1556 and 1739, the Mughal court was on tour 40 per cent of the time.⁶⁶ Hunting was always on the agenda during royal tours, which were usually referred to as 'hunting expeditions' in Mughal chronicles. Abu'l-Fazl frequently justifies Akbar's *shikars* by categorically stating that good governance and 'higher aims' were the true intent of his hunting practices, whereby the hunt was used to personally conduct inquiries into the state of charitable and agricultural lands, ensure fairness of taxation laws, and identify and solve the problems of his subjects.⁶⁷ Abu'l-Fazl's statements thus illustrate the political flexibility of the *shikargah* as a space to hold court and tend to administrative affairs and the dispensing of justice while simultaneously indulging in the hunt.

The Mughal court on the move was an opulent procession of humans, animals, and equipment [Figure 5].⁶⁸ Akbar transformed the Timurid tradition of the royal camp into 'an elaborate bureaucratic institution which effectively moved the imperial household and administration of the empire to wherever the emperor was travelling'.⁶⁹ The encampment thus became a mobile capital and the seat of imperial authority containing all the essential components of the central administration, such as audience halls; the chancery; the treasury and mint; stables; artillery; a large portion of the main army; thousands of staff, servants, and porters; tens of thousands of domesticated and pack animals carrying equipment; and large bazaars of produce.⁷⁰ Bernier estimates that Aurangzeb's camp contained between 300,000 and 400,000 persons, adding that the entire population of Delhi was gathered in the encampment, 'deriving its employment and maintenance from the court and army'.⁷¹ *Shikargahs* therefore often served as encampment sites for the imperial entourage, which moved through the countryside in two leapfrogging camps, each camp being known as the *peshkhana* when in the lead. *Shikargahs* had to be large enough to accommodate these gigantic mobile cities, which were assembled and dismantled at short notice, and they also needed to include such facilities as a water supply and sanitation.

The emperor resided in one of numerous hunting *mahals*, or lodges, also referred to as halting places, and many were within a day's march from each other, with the royal train moving from one hunting ground to the next. The retinue also camped in luxurious pavilions that would be constructed by the advance party.⁷² The *A'in* offers a glimpse into the magnitude and splendour of these tent pavilions with its description of one built for Akbar.⁷³ Set up on the eastern side of the *gulalbar* (grand enclosure), the *baghah* (tent-hall) consisted of 54 chambers and could contain more than 10,000 people; it took over a thousand workers a week to erect it with the help of machines.⁷⁴ Inside the *gulalbar* was a large *chubin rawati* (wooden rectangular tent-pavilion) containing 40 divisions and ornamented with brocades and velvet on the interior.⁷⁵ Outside the *gulalbar* were 24 *rawatis* (rectangular tents) for the ladies of the harem. Adjacent to the main *rawati* was the *do-ashiyana manzil*, a two-storey pavilion that served as the emperor's bedchamber and place of worship and was fitted with a *jharokha* balcony window. The encampment of the nobles and

army was extensive and followed a strict hierarchical order. Problems caused by over-crowding of troops and other staff were settled by placing tents in a pattern, without which, as Abu'l-Fazl notes, 'it would take a soldier days to find his tent'.⁷⁶ Large-scale and often invasive landscape transformations were thus made to accommodate the encampment in the *shikargah*, and the political ramifications of the encampment as the mobile capital of the Mughal Empire became, by extension, that of the *shikargah* itself.

The *Shikargah*: Extension of the Court

The Mughal *shikargah* was an interactive zone between the royal hunter and his diverse terrain. It came to reflect the gravitas of the court and, to a certain degree, shape the political, cultural, and social landscapes of the empire. As a venue for various courtly rituals, justice, and administration, the *shikargah* underwent political processes of intervention that symbolically associated the hunting space with power and control. Jahangir, who hunted almost every day regardless of whether he was stationed at one of his capitals or on tour, recorded in minute detail the activities that took place in the *shikargah* before, during, and after the hunt. For instance, in 1617, while encamped at the *shikargah* by the tank at Nalchha, he entertained diplomats; rewarded those he favoured with gifts of land, elephants, and ceremonial robes; promoted the worthy; received gifts and tributes; and dispensed justice, all while engaging in the hunt.⁷⁷

The Mughals' political achievements lay in more than a series of conquests. Subjugated chieftains, fully aware of the might of the Mughal emperor, were ritually forgiven and incorporated into the polity. This was accomplished in large part through a series of symbolic courtly rituals that served to foster obedience and loyalty to the emperor, such as the *darshan*, discussed earlier. These ceremonies continued to be enacted even while the emperor was encamped in the *shikargah*, and tents and pavilions were equipped with an elevated throne and the *jharokha* window.⁷⁸ The *darbar*, or assembly of grandees before the enthroned emperor, followed a strict spatial order in delineated areas, with nobles of higher rank standing closer to the emperor.⁷⁹ Hierarchical relationships were further fostered on the *shikargah* by feasts and activities during and after the hunt.⁸⁰

Ties of loyalty with defeated chieftains and other nobles were also reinforced during the hunt. Jahangir used the occasion of a drive hunt to discreetly intimidate old enemies in the *shikargah*. In 1615, Rana Amar Singh of Mewar, a powerful Rajput king and a constant nemesis of the Mughal emperors, was eventually subdued by Prince Khurram. Accordingly, Amar Singh's son Karan Singh came to Ajmer to pay homage to Jahangir and remained there effectively as a hostage guaranteeing his father's continued subjugation. When the emperor's scouts brought news that a lioness had been cornered by Anasagar Lake, Jahangir, who was eager to impress, invited Karan Singh to witness his marksmanship. As requested by his 'guest', Jahangir shot the lioness in the eye, a feat made even more challenging because Jahangir's mount was restless due to stormy conditions.⁸¹ In a painting of the episode, Karan Singh touches his head in respect while others look astonished at Jahangir's feat [Figure 6]. Das notes that only Jahangir is shown carrying a gun as the event was a public demonstration of his skill; others were intended only to witness it.⁸² Jahangir then gifted Karan Singh his flintlock in the *shikargah*, a gesture perhaps intended to be a sign of benevolent control. While these highly



Indian Museum, Kolkata.

Figure 6: Jahangir and Rana Karan of Mewar in Anasagar Lake shikargah, Ajmer, 1615. Painting attributed to Nanha, c.1623, R316/S.163.



Victoria and Albert Museum, London.

Figure 7: Akbar captures his first cheetah in 1560, Hissar Firuza shikargah. Painting by Tulsi and Narayan, c.1590–95. From an Akbarnama manuscript, IS.2:2-1896.

politicized acts on the *shikargah* perpetuated the image of a caring and protective emperor, they also served to cultivate the loyalty of regional kings whose obedience was paramount to ensure the longevity of the Mughal dynasty.

Emperor Aurangzeb also used the *shikargah* as a flexible political tool to issue a didactic warning to his errant son, Azam. While encamped at Bankapur in 1693, Azam was summoned to the Bankapur *shikargah* with his two sons and a small entourage. Aurangzeb's encampment was pitched on a high ridge and the *shikargah* and hunting tent were on low ground, a fact noted by a nervous Azam. This arrangement also indicates the spatial relationship between the encampment and the *shikargah*: the two spaces appeared to integrate seamlessly. In this instance, the *shikargah* was used as an excuse to limit Azam's party to a bare minimum so as not to disturb the game already 'frightened' by the proximity of the encampment. Aurangzeb then proceeded to give his son an unsheathed royal sword, a veiled threat that indicated Azam was meant to be arrested but was released as a mark of royal favour.⁸³

The *qamargha* was the emperor's prerogative, and princes and nobles were allowed to participate only when invited. Grandees who were allowed into the ring a few days later were controlled by a strict pecking order in accordance with the *Tura-i Chingizi*.⁸⁴ During the abovementioned 1567 Lahore *qamargha*, after Akbar had hunted for five days in the steadily decreasing ring, the

great officers and the attendants of the harem were allowed to come into the hunting ground. Gradually the servants of the court were allowed to enter until at last the turn came of individuals from among the troopers and footmen.⁸⁵

During the 1578 *qamargha* organized for Akbar in Bhera, Baluchi chiefs who were earlier overwhelmed by the Mughal Army visited the *shikargah* to pay homage; Akbar ritually forgave them and instructed them to join him in the *shikargah*.⁸⁶ Pandian notes that by a process of subjugation followed by forgiveness and submission in the *shikargah*, rebel chiefs were symbolically incorporated into the Mughal polity with an order to hunt.⁸⁷

Interestingly, the Bhera *qamargha* of 1578 ended abruptly after Akbar had a spiritual experience in the *shikargah* while the preparations were ongoing. Abu'l-Fazl notes, 'A sublime joy took possession of his bodily frame. The attraction, *jazaba*, of cognition of God cast its ray'; Akbar then ordered that all the animals be released unharmed into their natural habitat.⁸⁸ Welch notes that two events immediately prior to the experience could have had some significance, namely, the visit to a Sufi shrine, and the preparations for the *qamargha*, which would have resulted in the terrible slaughter of animals.⁸⁹ Whatever the reasons for Akbar's deeply emotional revelation, the cancellation of such a large *qamargha* – an event that took great numbers of grandees and troops over ten days to organize, and involved animals driven in from Girjhak (a distance of 25 *kos*, or 100 kilometres) – was possibly a well-publicized event that had great political implications.⁹⁰

Akbar's manifesto of pluralism and religious tolerance extended to his hunting practices. While it is unclear whether he was genuinely affected by the ancient Indian doctrine of *ahimsa* (non-violence) or acted, as his ultra-orthodox Muslim courtier Bada'uni claims, out of political motives 'to please the Hindus', Akbar issued edicts forbidding the slaughter of animals on several religious days sacred to Muslims, Hindus, and Jains, and later extended this to a ban on slaughter for six months of the year.⁹¹ In 1610, Jahangir decided to

stop killing animals on Thursdays and Sundays, but added a proviso that hunting with cheetahs was allowed.⁹² He additionally took a vow of non-violence from 1618 to 1622, a pledge to the divine in return for restoring his health and that of his grandson Shah Shuja.⁹³ However, Jahangir frequently broke his vows due to his fondness for hunting or because he viewed certain situations as being of service to the public.⁹⁴ Ever enterprising, he neatly sidestepped his promise of not killing with his own hands by hunting with cheetahs or having his wife, Empress Nur Jahan, pull the trigger.⁹⁵

The *shikargah* was also often the site of courtly intrigue. In 1560, the young Akbar used it to create an opportunity to launch a surprise attack on Bayram Khan, his ambitious chief minister who had overstepped his powers.⁹⁶ Leaving Agra under the pretext of a hunting trip, Akbar and his cavalcade set out towards Delhi without Bayram's knowledge, and from there he declared that Bayram's authority had been terminated, thus forcing him to surrender. Perhaps to celebrate, Akbar then took a detour to the Hissar Firuza *shikargah*, where he bagged and collared his first cheetah.⁹⁷ The incident is the opening illustration of a chapter in the Victoria and Albert Museum's *Akbarnama*; it depicts a *shikargah* that has been reordered to accommodate a series of *odi* (pits) dug according to a special plan devised by Akbar in order to lure and capture the cheetahs.⁹⁸ Such an illustration attests to the significance of the event, which was Akbar's first act as emperor without the shackles of Bayram, and it also indirectly refers to the *shikargah* as an instrument of power [Figure 7].

***Shikargah* and the Art of War**

As mentioned above, the *shikargah* often served as an infrastructure for preparing and launching armed attacks. Babur notes several occasions on which he used *shikargahs* to encamp, gather allies and troops, stockpile supplies, pasture horses, and discuss strategies before an important attack.⁹⁹ While encamped at Turak *chaharbagh* in 1502, which was beside the site of a *qamargha* ring, Babur observed that Timurid army formations – right wing, left wing, and centre – were followed in the *qamargha*, with senior officers appointed to positions of honour in the wings.¹⁰⁰

The Mughal *shikargah* was a space to signal military intentions and demonstrate the emperor's ability to carry out the threat of attack, while hunting expeditions offered a successful cover for transporting troops into areas of unrest. Successive Mughal emperors departed with full regalia and massive armies under the pretext of innocuous hunting expeditions, their real aim being to lead reconnaissance trips to monitor possible sedition, intimidate restive provinces and chieftains, and initiate pre-emptive attacks on unsuspecting rebels and rivals to the throne. While Akbar and Shah Jahan mobilized 4000–5000 troopers,¹⁰¹ there were up to 100,000 soldiers involved in Aurangzeb's *qamarghas*.¹⁰² Of Akbar's mobilizations, Abu'l-Fazl writes, '[I]f all the faithful servants of the court who were associated with hunting should be added up, they would be enough to conquer the world'.¹⁰³ The 1578 *qamargha* organized for Akbar in Bhera involved animals driven in from a distance of 25 *kos*;¹⁰⁴ while the *qamargha* in 1567 in Lahore included more than 15,000 wild animals driven into an enclosed space by thousands of beaters alongside hunting cheetahs and hounds,¹⁰⁵ and the royal hunter responded to the chaos by demonstrating complete mastery over wild nature, a very public spectacle watched by the populace. The emperor's ability to command and control, the discipline of his troops and their formations, the practice of

horsemanship, and the movement of vital supplies during a *qamargha* were all analogous to the features of warfare, and hence ideal training for battle. A show of strength and martial prowess at strategic locations of unrest meant that the emperor could send overt signals of his political and military intentions from a distance, which was often sufficient to avoid armed confrontations. The Malwa campaign of 1564, which began as an elephant-hunting expedition, was quickly transformed into a military strike against the rebellion caused by Abdullah Khan Uzbek. Interrupting his hunt, Akbar pursued the seditious chief, who soon surrendered, and Akbar and his entourage subsequently returned to the *shikargah*.¹⁰⁶

This was also certainly the case in the 1567 *qamargha*, when Akbar's brother, Mirza Hakim, fled upon news of the imperial armies' approach toward Lahore. The *qamargha* that was subsequently ordered not only ensured Mirza Hakim's flight, but it also secured the involuntary submission and allegiance of petty chiefs.¹⁰⁷ This *qamargha* also became an impromptu stage for the trial of Akbar's equerry Hamid Bakari. Although his life was spared, his head was shaved, and he was mounted on an ass and paraded around the *shikargah* as a warning to others.¹⁰⁸

When the infamous Mirza Hakim led a revolt yet again, Akbar set off towards Kabul in 1581 while the army and court were told to prepare for a hunting trip. Although Mirza Hakim took flight, Akbar continued with the 'hunting trip' towards Kabul in a show of strength, a move that was possibly meant to warn other rebellious kings. Monserrate relates that Akbar set out from Fatehpur Sikri with a massive army that marched in a crescent-shaped formation.¹⁰⁹ As the march progressed, men were conscripted from the surrounding countryside and the crescent-shaped army extended its size in breadth to a mile and a half, covering fields and woods. Monserrate implies that animals were hunted along the way in what seems to be a monumental, mobile *qamargha* semi-circle: '[o]rders are always given that no one is to approach the line of march [...] to prevent wild beasts being frightened away'.¹¹⁰ Yet again, farmlands, fields, and woods, previously unremarkable, assumed the characteristics of a *shikargah* and an imperial identity by virtue of the fact that the emperor and his retinue hunted there. Petty kings of the traversed regions voluntarily paid homage and bound themselves to the emperor with treaties, gifts, and promises.¹¹¹ The Mughal *shikargah* was as much a political stage to laud the victorious emperor as it was a space for him to flex his muscles and intimidate real and potential rivals.

Conclusion

While a few hunting palaces such as the Lal Mahal in Bari are extant, the adjoining *shikargahs* have been engulfed by either the twenty-first-century urban sprawl or the advancing cultivation of the Indian subcontinent. Some now survive as national parks, such as Ranthambhore, Rajasthan. However, colonial sporting practices since the mid-nineteenth century and subsequent conservation efforts by the Indian government have all but deprived these *shikargahs* of their original characteristics and symbolism. Emphasis on animal conservation has introduced other kinds of modifications to the terrain, the most important being the relocation of many villages away from the preserves, as 'tigers and human beings cannot share the same tract of forest'.¹¹² This is a departure from one of the distinguishing qualities of the Mughal hunting ground: its proximity to urban contexts and capital cities, a feature that is

often lauded in chronicles and constantly amazed European visitors to the Mughal court.¹¹³

The Mughals were ardent hunters who hunted whether stationed in one of their capital cities or on tour. Availability of abundant game and the resulting frequency of royal hunts meant large swathes of the empire were designated as imperial hunting grounds; Mughal sources record over seventy *shikargahs*. Depending on habitats of specific game, *shikargahs* were situated in mountainous forests, deserts, Indo-Gangetic floodplains, rocky outcrops, and coastlands. While the emperors preferred to hunt at one of their many *shikargah-i muqarrars*, they seem to have hunted wherever and whenever an opportunity presented itself. They were frequently called upon by their subjects to rid the countryside of menacing wild beasts, a role the emperor took seriously as a protector of his people able to overcome the forces of evil and thereby demonstrate 'the imperial myth of authority'.¹¹⁴ Jahangir notes several instances when his scouts brought news of a captured lion, claiming, for instance, that 'with three shots [he] delivered the people of its evil menace and it of its own evil nature'.¹¹⁵ It seems that wherever the emperor hunted, be it in one of the established hunting grounds or in the wilderness en route to a distant province, or even in the middle of a village or sugarcane plantation, that space took on the political implications of sovereignty and power that were characteristic of a *shikargah*.

The Mughal *shikargah* was far removed from conventional spatial and functional definitions of a hunting ground as a wild, untamed, amorphous space in which to hunt game. Though sketchy, references to the *shikargah* do indicate that it was a complex, interactive space between the emperor and his diverse terrain, and conceived to host multifarious functions. It is reasonable to believe that all Mughal *shikargahs* required environmental manipulation in order to shape them to suit the emperors' requirements and expectations. The degree of transformation varied in accordance with function: some modifications were carried out in relation to hunting apparatus, while others involved making the site more congenial for imperial use. The accommodation of courtly and bureaucratic functions, encampments, and war machinery entailed yet other types of landscape interventions and management. Whether facilitating the hunt, or modifying a site for aesthetic and other purposes, the processes of altering the hunting environment invariably advertised the power of the emperor, who had the capacity to subdue nature and symbolically assert his authority over animals and people alike. The *shikargah* thus emerges as a rich and telling case study in interpreting Mughal landscapes, and especially their far-reaching political implications.

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Endnotes

1. For discussion of lesser-known Mughal hunting practices and animal characteristics, see Divyabhanusinh, 'Hunting in Mughal Painting', in *Flora and Fauna in Mughal Art*, ed. Som Prakash Verma (Mumbai: Marg Publications, 1999), 94–108.
2. Thomas T. Allsen, *The Royal Hunt in Eurasian History* (Philadelphia: University of Pennsylvania Press, 2006), 50.
3. 'Turan' was a term referring to the region of Transoxiana, north of the Oxus, and the inhabitants were referred to as 'Turanians'. For discussion of the Mughal polity, see Irfan Habib, ed., *Akbar and His India* (New Delhi: Oxford University Press, 1997); see especially Ahsan Raza Khan, 'Akbar's Initial Encounters with the Chiefs: Accident vs. Design in the Process of Subjugation', in *Akbar and His India*, ed. Irfan Habib (New Delhi: Oxford University Press, 1997), 1–14; and S. Inayat A. Zaidi, 'Akbar and the Rajput Principalities: Integration into Empire', in *Akbar and His India*, ed. Irfan Habib (New Delhi: Oxford University Press, 1997), 15–24.
4. John F. Richards, 'The Formulation of Imperial Authority under Akbar and Jahangir', in *Kingship and Authority in South Asia*, ed. J. F. Richards (Delhi: Oxford University Press, 1998), 287.
5. Abu'l-Fazl, *The Akbar Nāmā of Abu-l-Fazl [Akbarname]*, 3 vols, trans. H. Beveridge (Calcutta: Asiatic Society, 1907–12, repr. 2010), vol. 2, 407–19.
6. In Shaha Parpia, 'Mughal Hunting Grounds: Landscape Manipulation and "Garden" Association', *Garden History: Journal of the Gardens Trust* 44.2 (2016): 171–90, I highlight the close relationship between the Mughal *shikargah* and the concept of 'the garden'. In addition to meaning the ubiquitous formal gardens found in palatial and funerary contexts, the Mughal word for 'garden', *bagh*, encompasses working orchards, agricultural lands, meadows, and suburban gardens that accommodated army encampments. Many of these garden components were also assimilated into the broader domain of the *shikargah*, as hunting often took place in agricultural settings and hunting gardens. The creation and utilization of both the *bagh* and the *shikargah* involved a similar refashioning

of nature. Shared territorial functions, design elements, and cultural ties between the two spaces further suggest that the Mughal *shikargah* was likely perceived as integrating and overlapping with aspects of garden design, an association that demonstrates the broader role of the *shikargah* in the study of Mughal landscapes and gardens.

7. Mubarak Ali, 'The *Turah-i-Chingizi* at the Mughal Court', *Lahore Museum Bulletin* 4.1–2 (1994): 99–101. The *Tura* determined the *qamargha*'s exclusively imperial nature, the hierarchy of the grandees allowed to attend, and the seating arrangements and social protocols of the gathering.
8. Maria Eva Subtelny, 'The Timurid Legacy: A Reaffirmation and a Reassessment', *Cahiers d'Asie Centrale* 3–4 (1997): 14.
9. Jahangir, *Jahangirnama: Memoirs of Jahangir, Emperor of India*, trans. Wheeler M. Thackston (New York: Oxford University Press, 1999), 401. For other editions of the memoirs of Emperor Jahangir, see Jahangir, *Tūzuk-i-Jahāngīrī or the Memoirs of Jahāngīr [Tuzuk]*, trans. Alexander Rogers, ed. Henry Beveridge, 2 vols (London: Royal Asiatic Society, 1909–14, repr. 2003); and Jahangir, *Toozuk-i-Jehangeere* [*Toozuk*], ed. Syed Ahmad Khan (Aligarh, 1863–64).
10. Francois Bernier, *Travels in the Mogul Empire*, trans. Archibald Constable (London: Oxford University Press, 1934, repr. 1983), 378. For further details on Mughal lion hunts, see Robert Skelton, 'Two Mughal Lion Hunts', *Victoria and Albert Museum Yearbook* 1.38 (1969): 33–34.
11. For details of the Anup Rai incident, see 'Inayat Khan, *The Shah Jahan Nama of Inayat Khan: An Abridged History of the Mughal Emperor Shah Jahan, Compiled by His Royal Librarian: The Nineteenth-Century Manuscript Translation of A.R. Fuller (British Library, Add. 30,777) [Shahjahannama]*, trans. A. R. Fuller, eds W. E. Begley and Z. A. Desai (Delhi: Oxford University Press, 1990), 5; Abd al-Hamid Lahori, *Lahori's Padshahnamah: 1592–1638 [Padshahnama]*, 2 vols, trans. and ed. Hamid Afaq Siddiqi (Delhi: Idarah-i Adabiyat-i Delli, 2010), vol. 1, 158–59. See also Jahangir, *Tuzuk*, 185–86.
12. Milo Cleveland Beach and Ebba Koch, *King of the World: The Padshahnama, An Imperial Mughal Manuscript from the Royal Library, Windsor Castle* (London: Azimuth, 1997), 188. The Windsor *Padshahnama* has particular significance because it was gifted by the Nawab of Oudh to King George III in 1799, following a precedent set by Shah Jahan, who gifted a signed illustrated manuscript to Charles I in 1638 as a diplomatic gift. The *Padshahnama* has remained in the Royal Library ever since. See Beach and Koch, *King of the World*, 6–7.
13. Lisa Balabanlilar, 'Lords of the Auspicious Conjunction: Turco-Mongol Imperial Identity on the Subcontinent', *Journal of World History* 18.1 (2007): 4.
14. Al-Ghazali, *Ghazālī's Book of Counsel for Kings (Nasīhat al-mulūk)*, trans. F. R. C. Bagley, ed. Jalal Huma'i (London: Oxford University Press, 1964),

80. Ghazali's *Nasihāt al-muluk* belongs to a larger body of 'Mirrors for Princes', books of advice for kings. An important genre of classical Arabic and Persian literature, such works reflected in form and content a convergence of Persian and Arabic heritages. They are typically seen as treatises on kingship and manuals of etiquette, and they also contain political and ethical counsels addressed to rulers and courtiers. See al-Ghazali, *Ghazālī's Book of Counsel*, ix–xi.
15. Abu'l-Fazl, *Akbarnama*, vol. 1, 439.
 16. Allsen, *Royal Hunt*, 49. For Achaemenid *pairidaezas*, see Xenophon, *Anabasis*, trans. and ed. Carleton L. Brownson, 7 Books (Cambridge, MA: Harvard University Press, 1922), Book 1, Chapter 2, section 7 and Book 1, Chapter 4, section 9–11; and Xenophon, *Hellenica*, trans. and ed. Carleton L. Brownson, 7 Books (Cambridge, MA: Harvard University Press, 1918–1921), Book 4, Chapter 1, section 15–16.
 17. Elizabeth B. Moynihan, *Paradise as a Garden in Persia and Mughal India* (London: Scholar Press, 1980), 49.
 18. For Chinghisid hunting practices, see Ala al-Din Ata Malik-i Juwayni, *The History of the World Conqueror*, by 'Ala-ad-Din 'Ata-Malik Juvaini, 2 vols, trans. John A. Boyle (Cambridge, MA: Harvard University Press, 1958), vol. 1, 27–28.
 19. For Timurid hunting practices, see Ahmed ibn Arabshah, *Tamerlane, or Timur, the Great Amir*, trans. J. H. Sanders (London: Luzac, 1936), 308–09. The Chinghisids and Timurids used the *qamargha* to train soldiers and commanders in the discipline and techniques of war.
 20. Babur, *The Bābur-nāma in English: Memoirs of Bābur [Baburnama]*, trans. Annette Susannah Beveridge (London: Luzac 1922, repr. 1990), 81.
 21. Devin DeWeese, *Islamization and Native Religion in the Golden Horde: Baba Tükles and Conversion to Islam in Historical and Epic Tradition* (Pennsylvania: Pennsylvania State University Press, 1994), 181–82.
 22. John F. Richards, *The Mughal Empire* (Cambridge: Cambridge University Press, 1993), 2.
 23. Lisa Balabanlilar, *Imperial Identity in the Mughal Empire: Memory and Dynastic Politics in Early Modern South and Central Asia* (London: I.B. Tauris, 2012), 142–43. The *darshan*, with origins in Hindu religious practices, is essentially a 'viewing', but one implying 'an active and creative seeing'. The *darshan* was 'mutually participatory' in religious concepts – the worshipper takes *darshan* and the deity gives *darshan*.
 24. The *jharokha* is an elevated architectural frame in the shape of an overhanging window supported by brackets. See Ebba Koch, *Mughal Architecture* (Munich: Prestel-Verlag, 1991), 140. See also Richard M. Eaton, *The Rise of Islam and the Bengal Frontier, 1204–1760* (Berkeley: University of California Press, 1993), 160. It had symbolic significance as

the stage through which the central concepts of Mughal political culture could be enacted: subordination of all state servants, solidarity of the ruling class, and 'the precise position of each member relative to others in the graded hierarchy of state service' (Eaton, *Rise of Islam*, 160).

25. Abu'l-Fazl, *A'in-i Akbari* [A'in], 2nd ed., 3 vols, vol. 1, trans. H. Blochmann, ed. D. C. Phillott, vols 2 and 3, trans. H. S. Jarrett, rev. Jadu Nath Sarkar (Calcutta: Asiatic Society of Bengal, 1927–49, 1939, 1993, repr. 2010), vol. 1, 3, 163.
26. Someśvara III, *Mānasollāsa*, vol. 2, ed. Gajanan K. Shrigondekar (Baroda: Oriental Institute, 1939), 42–44. Although there are several references to animals in the Vedas and other Sanskrit literature, the *Manasollasa* is particularly relevant to this article, as it outlines 30 different deer-hunting techniques. For discussion of the *Manasollasa* and other Sanskrit and pre-Mughal literature with reference to the cheetah, see also Divyabhanusinh, *The End of a Trail: The Cheetah in India* (New Delhi: Banyan Books, 1995).
27. Someśvara, *Mānasollāsa*, 42.
28. Abu'l-Fazl, *A'in*, vol. 1, 302–03. See also Ebba Koch, 'Dara-Shikoh Shooting Nilgais: Hunt and Landscape in Mughal Painting', *Freer Gallery of Art Occasional Papers* 1 (1998): 11–58. Koch has written extensively on the decoy hunt and its visual depictions and makes the interesting observation that the composition of the painting and the treatment of the hunting landscape are linked to the hunting method. See also Ebba Koch, 'Renaissance Calendar Illustrations and the Representation of the Mughal Hunt', in *Islam and the Italian Renaissance*, eds Anna Contadini and Nicholas Mann (London: Warburg Institute and Victoria and Albert Museum, 1996), 167–83.
29. Abu'l-Fazl, *A'in*, vol. 2, 248. Mahmudabad was founded by the Delhi Sultan Nasir al-Din Mahmud Tughlaq (r.1393–94). Abu'l-Fazl notes that it was an extensive enclosed game preserve near Ahmadabad stocked with deer and other game, and that at every half *kos* a pleasure house was built.
30. Shahnavaz Khan Awrangabadi and 'Abd al-Hayy ibn Shahnavaz, *The Maāthir-ul-Umarā: Being Biographies of the Muhammadan and Hindu Officers of the Timurid Sovereigns of India from 1500 to about 1780 A.D.* [Ma'asir], 3 vols, trans. H. Beveridge and Bains Prasad (Patna: Janaki Prakashan, 1911–52, repr. 1979), vol. 2, 532. Dowson describes the *Ma'asir* as the 'Peerage of the Mughal Empire'. See H. M. Elliot, *The History of India, as Told by Its Own Historians: The Muhammadan Period*, vol. 8, ed. and continued by John Dowson (London: Trubner, 1877), 187.
31. Abu'l-Fazl, *A'in*, vol. 1, 297.
32. Awrangabadi and ibn Shahnavaz, *Ma'asir*, vol. 1, 158. See details of the Burhanpur *rumna* later in this article.
33. Godfrey Mundy, *Pen and Pencil Sketches, Being the Journal of a Tour in India*, 2 vols (London: John Murray, 1832), vol. 1, 26.

34. James Forbes, *Oriental Memoirs: Seventeen Years Residence in India*, 4 vols (London: White Cochrane, 1813), vol. 2, 481–82.
35. Abu'l-Fazl, *Akbarnama*, vol. 2, 343; see also Nizam al-Din Ahmad, *The Tabaqāt-i-Akbarī of Khwājah Nizāmuddīn Ahmad: A History of India from the Early Musalmān Invasions to the Thirty-Sixth Year of the Reign of Akbar [Tabaqat]*, trans. Brajendranath De, 3 vols (Calcutta: Asiatic Society, 1927–39, repr. 1996), vol. 2, 282, 286–87.
36. Abu'l-Fazl, *Akbarnama*, vol. 2, 343.
37. *Ibid.*, vol. 2, 368–69; Nizam al-Din Ahmad, *Tabaqat*, vol. 2, 293.
38. Irfan Habib, *The Agrarian System of Mughal India, 1556–1707* (New Delhi: Oxford University Press, 1963), 289–90. See also Royal Asiatic Society, *Akhbārāt- Darbar-i Mu'alla: Akhbārāt-i Shazada Muhammad Azam wa Akhbārāt-i Bahadur Shah*, (Aurangzeb Years) Morley 133, A 46–49.
39. Habib, *Agrarian System*, 290.
40. Pierre Du Jarric, *Akbar and the Jesuits: An Account of the Jesuit Missions to the Court of Akbar*, trans. C. H. Payne (London: Harper, 1926), 76.
41. Allsen, *Royal Hunt*, 16.
42. Abu'l-Fazl, *Akbarnama*, vol. 3, 346. One *kos* is approximately 4 kilometres: see Jahangir, *Jahangirnama*, Appendix A, 473.
43. Abu'l-Fazl, *Akbarnama*, vol. 2, 416–17; Nizam al-Din Ahmad, *Tabaqat*, vol. 2, 328. See also Susan Stronge, *Painting for the Mughal Emperor: The Art of the Book, 1560–1660* (London, V&A Publications, 2002), 63–65.
44. The event 'is recorded in a stylized way that reduces the vast hunt to a metaphorical area, the swirling movement of the animals brilliantly suggesting the swiftness of the hunt'. Stronge, *Painting for the Mughal Emperor*, 65.
45. See for example, Jahangir, *Jahangirnama*, 83, 87, 91, 126–27, 299–300, 376.
46. *Ibid.*, 258–59.
47. Jahangir, *Tuzuk*, vol. 1, 125; Jahangir, *Toozuk*, 60.
48. Koch, 'Dara-Shikoh', 24.
49. Abu'l-Fazl, *A'in*, vol. 1, 292–93.
50. Koch, 'Dara-Shikoh', 33. See also Ellen S. Smart, 'A Recently Discovered Mughal Hunting Picture by Payag', *Art History* 2.4 (1979): 396–400.
51. Jahangir, *Jahangirnama*, 69.
52. Jahangir, *Tuzuk*, vol. 1, 90–91, vol. 2, 182; Jahangir, *Toozuk*, 44, 318. See also Catherine Asher, *Architecture of Mughal India* (Cambridge: Cambridge University Press, 1992), 125–27 and 205.

53. Jahangir, *Jahangirnama*, 350; Jahangir, *Toozuk*, 318.
54. Jahangir, *Jahangirnama*, 83; Jahangir, *Toozuk*, 58.
55. Jahangir, *Jahangirnama*, 126–27, 299–300.
56. *Ibid.*, 126–27.
57. *Ibid.*, 87.
58. Lahori, *Padshahnama*, vol. 1, 91; Awrangabadi and ibn Shahnavaḥ, *Ma'asir*, vol. 1, 158.
59. Awrangabadi and ibn Shahnavaḥ, *Ma'asir*, vol. 1, 158; 'Inayat Khan, *Shahjahannama*, 70.
60. Beach and Koch, *Padshahnama*, 110, 210. Koch has identified this image as corresponding to the Burhanpur lion hunt in 1630 due to the unusual net, *badar*, used during this event instead of the usual *saraparda* screens. Lahori also mentions that the *badar* was large: 10,000-*zira*-*i padshahi* (approx. 8.2 kilometres) long and 6-*zira* (approx. 5 metres) high. Lahori, *Padshahnama*, vol. 1, 80–81.
61. For discussion of the Mughal garden as a metaphor for power, see for example, Ebba Koch, 'The Mughal Waterfront Garden', in *Gardens in the Time of the Great Muslim Empires: Theory and Design*, ed. Attilio Petruccioli (Leiden: Brill, 1997), 140–59; J. Wescoat, 'Landscapes of Conquest and Transformation: Lessons from the Earliest Mughal Gardens in India, 1526–30', *Landscape Journal* 10.2 (1991): 105–14.
62. See Gauvin Bailey, 'The Sweet-Smelling Notebook: An Unpublished Mughal Source on Garden Design', in *Gardens in the Time of the Great Muslim Empires: Theory and Design*, ed. Attilio Petruccioli (Leiden: Brill, 1997), 132. See also Parpia, 'Mughal Hunting Grounds', 183–86.
63. R. D. McChesney, 'Some Observations on "Garden" and Its Meanings in the Property Transactions of the Juybari Family in Bukhara, 1544–77', in *Gardens in the Time of the Great Muslim Empires: Theory and Design*, ed. Attilio Petruccioli (Leiden: Brill, 1997), 103.
64. Bailey, 'Sweet-Smelling Notebook', 132–33. See Jahangir, *Tuzuk*, vol.1, 182, 232, 234, vol. 2, 75–76.
65. Jahangir, *Jahangirnama*, 202. Jahangir hunted here 38 times between 1613 and 1616.
66. Stephen P. Blake, *Shahjahanabad: The Sovereign City in Mughal India, 1639–1739* (Cambridge: Cambridge University Press, 1991), 97.
67. Abu'l-Fazl, *A'in*, vol. 1, 173, 292.
68. For Shah Jahan's ceremonial procession into Agra in 1632 after a hunting expedition, see Peter Mundy, *The Travels of Peter Mundy in Europe and Asia, 1608–1667*, vol. 2 (London: Hakluyt Society, 1924), 192–94.

69. Beach and Koch, *Padshahnama*, 194.
70. Richards, 'Formulation of Imperial Authority', 294–95.
71. Bernier, *Travels*, 380–81.
72. For details of the *peshkhana* and hierarchy of tent assemblage, see Abu'l-Fazl, *A'in*, vol. 1, 47–50. See also A. Monserrate, *The Commentary of Father Monserrate S. J. on the Journey to the Court of Akbar*, trans. J. S. Hoyland, annotated by S. Banerjee (Humphrey Milford: Oxford University Press, 1922), 75–76.
73. Abu'l-Fazl, *A'in*, vol. 1, 55–56.
74. *Ibid.*
75. *Ibid.*, 47–48, 55–56.
76. *Ibid.*, 49.
77. Jahangir, *Jahangirnama*, 232–33.
78. Richards, 'Formulation of Imperial Authority', 295.
79. Ebba Koch, 'The Hierarchical Principles of Shah-Jahani Painting', in *Mughal Art and Imperial Ideologies: Collected Essays* (New York: Oxford University Press, 2001), 133.
80. Balabanlilar, *Imperial Identity*, 88.
81. Jahangir, *Jahangirnama*, 174.
82. Asok Kumar Das, 'Mughal Royal Hunt in Miniature Paintings', in *Indian Museum Bulletin* 2 (1967): 22.
83. Awrangabadi and ibn Shahnavaz, *Ma'asir*, vol. 2, 330–31.
84. Ali, 'Turah-i-Chingizi', 101.
85. Abu'l-Fazl, *Akbarnama*, vol. 2, 417.
86. *Ibid.*, vol. 3, 342–46.
87. Anand S. Pandian, 'Predatory Care: The Imperial Hunt in Mughal and British India', *Journal of Historical Sociology* 14.1 (2001): 99.
88. Abu'l-Fazl, *Akbarnama*, vol. 3, 346–47.
89. Annemarie Schimmel and Stuart Cary Welch, 'Akbar and his Times', in *Anvari's Divan: A Pocket Book for Akbar: A Dīvān of Aḥḥaduddin Anvari, Copied for the Mughal Emperor Jalaluddin Akbar (r.1556–1605) at Lahore in A.H. 996/A.D. 1588. Now in the Fogg Art Museum of Harvard University* (New York: Metropolitan Museum of Art, 1983), 26.

90. In 1571, Akbar had a similar spiritual experience in the Pak Patan *shikargah* after visiting a Sufi saint. Abu'l-Fazl, *Akbarnama*, vol. 2, 522.
91. Abd al-Qadir Bada'uni, *Muntakhabu-t-Tawārīkh*, 3 vols, trans. W. H. Lowe (Calcutta: Royal Asiatic Society of Bengal, 1899, repr. 1990), vol. 2, 331.
92. Jahangir, *Jahangirnama*, 117. Thursday was Jahangir's accession day, while Sunday was Akbar's venerated day.
93. Jahangir, *Tuzuk*, vol. 2, 36, 45. Ellison B. Findly, 'Jahangir's Vow of Non-Violence', *Journal of the American Oriental Society* 107.2 (1987): 248, 252. Although Jahangir is explicit in his reasons for the vow, he had in any case decided to renounce hunting after his 50th year (Jahangir, *Tuzuk*, vol. 2, 45). Findly suggests that the reason could be remorse, as he had, among other reasons, ordered the killing of Abu'l-Fazl.
94. See for example, Jahangir, *Jahangirnama*, 213. While encamped at Nalchha in 1617, Jahangir's scouts brought word that a lion had been surrounded. Although it was a Sunday, a day on which he did not hunt with guns, he decided that it was a harmful animal and that 'it should be taken care of'.
95. *Ibid.*, 117, 313.
96. Abu'l-Fazl, *Akbarnama*, vol. 2, 138, 152, 157–60.
97. *Ibid.*, vol. 2, 186–87.
98. *Ibid.* See also Stronge, *Painting for the Mughal Emperor*, 60–62.
99. See for example, Babur, *Baburnama*, 108, 138, 316, 409.
100. *Ibid.*, 155–56.
101. Du Jarric, *Jesuits*, 9–11; Inayat Khan, *Shahjahannama*, 124.
102. Bernier, *Travels*, 375.
103. Abu'l-Fazl, *Akbarnama*, vol. 2, 442.
104. *Ibid.*, vol. 3, 346.
105. Nizam al-Din Ahmad, *Tabaqat*, vol. 2, 328.
106. Abu'l-Fazl, *Akbarnama*, vol. 2, 342–53.
107. *Ibid.*, 407–19.
108. *Ibid.* This punishment is actually depicted in a painting for an *Akbarnama* manuscript held at the Victoria and Albert Museum, London, illustrated here as Figure 2. In the upper-right-hand corner of the double-page painting, a topless Hamid Bakari is depicted with his head shaved, seated backwards on an ass as he is paraded around the *qamargha*.

109. Monserrate, *Commentary*, 76–78.
110. *Ibid.*, 77.
111. *Ibid.*, 80.
112. Valmik Thapar, *Wild Tigers of Ranthambhore* (New Delhi: Oxford University Press, 2000), 17. Many villages, including Anantpura, Berda, and Lakarda, were moved outside the boundaries of Ranthambhore Park in 1976–77.
113. Jahangir, *Jahangirnama*, 162. Jahangir mentions that Hafiz-Jamal's only flaw was that it was not located in a large city. See also Mundy, *Sketches*, 37–41, 48–51, 73; Mundy mentions *shikargahs* in the vicinity of major cities such as Lucknow (37–41), Fatehgarh (48–51), and Belaspore (73).
114. Richards, 'Formulation of Imperial Authority', 286.
115. Jahangir, *Jahangirnama*, 219. The usual practice in such instances was for the emperor and his retinue to mount elephants and encircle the lions' as in a *qamargha'* before the lions were killed in full view of his subjects.

CHAPTER 2

Mughal Hunting Grounds: Landscape Manipulation and “Garden” Association’

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This paper reports on original research I conducted during the period of my Higher Degree by Research candidature and is not subject to any obligations or contractual agreements with a third party that would constrain its inclusion in this thesis. I am the primary author of this paper.

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MUGHAL HUNTING GROUNDS: LANDSCAPE MANIPULATION AND 'GARDEN' ASSOCIATION

Mughal chronicles and documents suggest that the shikargah, or hunting ground, was a valuable instrument through which the emperor could appropriate and subdue nature. The shikargah was also closely related to the idea of the 'garden'. Prevailing perceptions of Mughal gardens have an exclusive typology featuring formal layouts and water features, and functioned in palace, pleasure and funerary contexts. However, Mughal garden denotations also incorporated agricultural lands, working orchards, meadows and spaces to accommodate encampment of armies. Creation of both spaces entailed manipulations to the environment and included clearing forests, replanting, diverting rivers and building architectural structures. The encampment and activities enacted on its site reinforces the relationship between the two spaces. While not implying hunting took place in formal garden settings, shared experiences, and common features and functions suggest that the shikargah seamlessly integrated with the expanded model of the garden as it did in its ancient antecedent, the Achaemenid pairidaeza paradise park. This paper demonstrates how the shikargah, as a medium for studying landscape can set new boundaries for garden research.

The imperial hunt was one of the most enduring institutions of the Mughal dynasty, which ruled over the Indian subcontinent from 1526 to 1858. Babur, Humayun, Akbar, Jahangir, Shahjahan and Aurangzeb, or the Great Mughals (1526–1707) as the first six emperors of the dynasty were known, were passionate hunters and dedicated to the *shikar*, or hunt. The emperors saw the hunting apparatus as a valuable instrument to project kingship and good governance, and a means to demonstrate continuity and loyalty to their Timurid ancestry.¹ The act of hunting was considered an integral part of Mughal imperial society, and the *shikargah*, or hunting ground, had profoundly pivotal roles to play in shaping the political, social and cultural life of the Mughals.² It was a symbol of conciliation between the emperor and the forces of nature that had to be subdued to protect his subjects. There are numerous references to imperial participation in the *shikar* in Mughal sources and the quantities of game taken; the typology of the *shikargah*, however, remains elusive in textual sources and has to be reconstructed by examining how the space was experienced. These indicate that the *shikargah* took on a variety of forms and functions.³

The Mughal *shikargah* is also closely associated with the concept of the 'garden'. This aspect requires reinterpreting how the Mughals conceptualized their gardens, both real and allegorical using textual sources, illustrations, archaeology and examining the few that survive. Traditional scholarship has focused extensively on the spatial and metaphorical aspects of the so-called Mughal *chaharbagh* garden broadly perceived as a protected, paradisiacal space featuring a cross-axial layout, pavilions, walkways, pools

and water channels and its use in funerary, pleasure and retreat contexts. These formal gardens typically fit in with modern perceptions of Mughal gardens. However, emphasis on stereotypical definitions of typology, symbolism and aesthetics not only relegate the contextual nature of its creation to the periphery, but also it simply ignores the existence of the 'other' Mughal garden. For the Mughals, the garden also included cultivated fields, fruit orchards, meadows, groves and suburban gardens large enough to accommodate encampments of armies. Mughal gardens should therefore be examined in the broader spectrum in which they were intended to operate.⁴ The creation of these spatially and functionally related spaces involved modifications to the environment, and interactions with the larger landscape and surroundings which likely included sites where hunting took place.

This research finds evidence that there were close bonds between the *shikargah* and the Mughal garden. While many 'favoured' and 'frequented' *shikargahs* had similar spatial features of gardens, hunting also seems to have taken place in garden contexts. Common functions and design elements, close cultural ties, and shared experiences and dynamics between the two spaces suggest that the Mughal *shikargah* was likely perceived as an extension of the garden as it was in its historical antecedent, the *pairidaeza* or paradise park. This paper shows how the *shikargah*, as an agency for studying landscape, can set new boundaries for garden research.

ORIGINS OF THE HUNTING PARK

The origins of the Mughal *shikargah* as well as their gardens can be traced back to the Median (678–549 BCE) and Achaemenid (550–330 BCE) *pairidaeza* or paradise parks. Thanks in large part to the extensive writings of the Greek mercenary Xenophon, and archaeological remains of the palace of Cyrus the Great (559–530 BCE) at Pasargadae, reconstruction of the form and function of the royal *paradeisos* (*pairidaeza* in Old Persian) and inner garden has been possible. Xenophon mentioned that Cyrus had a palace and a large *paradeisos* park full of wild beasts which he used to hunt on horseback, and another enclosed *paradeisos* of fruit orchards in Syria.⁵ It is therefore likely that the royal Achaemenid paradise hunting parks were typically enclosed spaces that included orchards and agricultural lands, extensive irrigation systems, palaces and pavilions with formal gardens, protected forests and game for the chase.

A continuous chain of transmission led to the Sassanians (224–651 CE) adopting the *pairidaeza*. The remains of the Imarat-i Khusrau palace in Qasr-i Shirin hunting park, Iran, reveal valuable clues as to how their successors, the Abbasids (750–1258 CE), may have transformed the *pairidaeza* concept into a Quranic paradise garden. Ralph Pinder-Wilson described the complex as standing on a high terrace in the middle of a large *pairidaeza* enclosed by a wall. Another wall within the *pairidaeza* enclosed the palace, formal gardens and an ornamental pool.⁶ It is likely that the inner walled formal garden of the palace structure gradually evolved into the *chaharbagh* garden with its geometrical and symmetrical layout, intersecting walkways, pools and pavilions which invariably became the blueprint for the earthly paradise garden.⁷

With the passage of time Persianate gardens generally became centres of retreat and pleasure. However, the Ilkhanids and especially the Timurids, in keeping with their nomadic lifestyle, adopted the earlier Perso-Islamic gardening traditions of geometrically laid out gardens but extended their function and design to include spaces for royal encampments, and agricultural orchards of fruit trees and grapevines.⁸ The hunting practices and ideals enshrined in the *pairidaeza* concept were revitalized by the Timurids and the Mughals as vital institutions with which they could demonstrate power

over nature and, by extension, over their subjects, while simultaneously linking them to illustrious ancients. This was the ideal that Babur and successive Mughal emperors wished to emulate in India.

THE MUGHAL GARDEN – FORM AND FUNCTION

Babur famously claimed in his memoirs, the *Babur-Nama*:

Then in charmless and disorderly Hind, plots of gardens were seen laid out with order and symmetry with suitable borders and parterres in every corner, and in every border rose and narcissus in perfect arrangement [...] the people of Hind had never seen grounds planned so symmetrically.⁹

This powerful vignette not only indicates his desire to introduce the formal *chaharbagh*-type garden to India with its characteristic order and symmetry, but also spells out the political aspirations that the Mughal emperors had in store for India through the garden metaphor – a desire to bring about internal order and political and cultural control. Traditional scholarship has focused largely on the spatial and metaphorical aspects of the so-called Mughal *chaharbagh* or *charbagh* garden, broadly perceived as a protected, paradisiacal space and visualized in its ideal form as a square plot divided into four by cross-axial walkways and water channels, pavilion and pool.¹⁰ Successive Mughal emperors built an array of formal gardens including the acclaimed funerary spaces and riverside gardens in Agra and Delhi, and the terraced gardens in Kashmir. These elite gardens generally correspond to modern prevailing perceptions of Mughal gardens. However, these formal spaces are not the only landscape narrative the Mughals set out to create.

The Mughals also developed concurrently some basic models of what constituted a ‘garden’ as opposed to the formal layouts with ornamental planting and water features. The word ‘*bagh*’ as noted above was a generic term that encompassed a variety of related cultivated spaces such as orchards, meadows, groves and vineyards. Babur described the gardens of Aush and Andijan as *baghat*, *baghlar* and *baghcha*, meaning orchards, vineyards and small garden plots respectively, but Annette Susannah Beveridge commented that Babur probably meant ‘all sorts of gardens’ in his descriptions.¹¹ An unlikely Shaybanid (1500–98 CE) *iqrar*, a commercial document concerning the sale deeds of the Juybari family in Bukhara, 1544–77, provides extensive references to specific types of cultivation undertaken in a garden. R. D. McChesney has summarized the details found in the *iqrar* and noted that the concept ‘garden’ was embraced by the terms *bagh* (an enclosed area that had architectural structures and could contain fruit and shade trees and grapevines), *baghcha* (a small garden), *bustan* (a flower garden or fruit orchard), *chaharbagh* (although commonly associated with formal, quadripartite layouts, pool, pavilions, water channels and walkways, these features were not always present; the *iqrar chaharbaghs* commonly contained cultivated areas, fruit orchards and other non-bearing trees, grapevines, and built structures), *gulistan* (a flower garden), *muhawwata* (an enclosed garden growing crops or grapevines and hence similar to *bagh* and *chaharbagh*) and *rabaz* (a suburban garden or a built-up structure).¹² The influential Timurid agricultural manual *Irshad al-zira’a* further suggests that in the *baghs* around Herat there was widespread cultivation of fruits in orchards and groves, vineyards, flower and herb gardens, markets vegetable plots and cereal fields.¹³ Hence, it is reasonable to believe that late Timurid and Mughal gardens often integrated related spaces such as farmyards, flower gardens with economic and ornamental uses, working orchards with commercial value, meadows and grazing fields, vineyards and architectural structures.

These spaces functioned as encampment sites, imperial residences, places to hold court and courtly rituals, dispense justice and various activities linked to the administration of the empire and are discussed at length later in this paper.

Another reference to the extended garden is seen in the *A'in-i Akbari*. Abu'l Fazl noted that in the area between Pattan and Baroda in Gujarat province, a distance of one hundred *kos* (about four hundred kilometres), prickly pear fences were planted around agricultural fields (*kesht va kar*) and around gardens (*bagh*) growing mango, fig, muskmelon and other fruits, 'From the numerous groves of mango and other trees it may be said to resemble a garden (*bustan*)', adding 'wild leopards/cheetahs abound nearby'.¹⁴

The Bagh-i Wafa, near Jalalabad, Afghanistan, is one of Babur's most celebrated gardens (Figure 1). Most sources emphasize its quadripartite layout, which Babur described: 'the *charchaman* [four plots] in the middle of the garden is situated on the top of a hill'.¹⁵ This cross-axial feature and formal layout was further popularized by Akbar-era illustrations of the *Babur-Nama*. The three artists from Akbar's atelier, Bishandas, Bhagawan and Dhannu, who illustrated three of the Bagh-i Wafa paintings in the 1590s, have interpreted the garden as a classic *chaharbagh*. While relying on the *Babur-Nama* for descriptions and the rendering of the four plots, they ultimately reveal Akbar-era sensibilities of garden imagery. However, Babur claimed that his favourite spot in the garden was the sizeable clover meadow surrounding a large pool, and that the trefoil meadow surrounded by substantial quantities of orange, pomegranate, citrons and other fruit trees was its most prominent feature. Hence, the quadripartite plots seem to have been just one feature of the huge garden. He also indicated that sugar cane and bananas were imported from India and grown here successfully. Babur also alluded to the fact that the Bagh-i Wafa was a working orchard as the fruits from its trees were distributed to his armies, and that its fields were grazing and encampment sites.¹⁶

Hence, conventional typologies of Mughal gardens being strictly quadripartite, criss-crossed by water channels and walkways, is insufficient to explain the contextual nature under which they came into existence. It is therefore appropriate to believe that Mughal garden terminology as perceived by its creators probably included larger landscape and environmental links. Many of these spaces were also assimilated in the *shikargah* discussed below. While this by no means implies that hunting took place in formal garden settings, the suggestion is that the *shikargah* should not be seen in isolation from functionally and spatially related garden spaces that included cultivated lands, orchards and meadows.

Mughal gardens involved a transformation and 'mediation' to the environment to shape it to suit imperial requirements and expectations.¹⁷ These alterations typically involved replanting, often with non-native species, building walls and structures, public works, and irrigation systems; while complex engineering feats using wells, stepwells and waterwheels created tanks, reservoirs and artificial lakes to bring water to dry and arid spots. Babur outlined in great detail the landscape manipulations and infrastructure of water projects involved in creating a garden, a feat made ever more challenging as the grounds were 'so bad and unattractive that we traversed them with a hundred dis gusts and repulsions'.¹⁸ First, he ordered the foundation of a large well which would supply water to the bath house. Once the great pool and courtyard were laid in the tamarind grove, the tank and pavilion in front of the external buildings were constructed. Finally came the private dwelling and garden followed by the bath house.¹⁹ Engineering and water management were an integral part of landscape transformations that enabled cultivation and they also enhanced the vistas.²⁰

In 1607, Jahangir and his armies were encamped in Bagh Shahrara in Kabul, a multi-terraced fruit orchard, *chinar* tree grove, vineyards and pavilions originally laid by Babur's aunt Shahr-banu Begam.²¹ Having chanced upon an 'excellent' plot adjacent to it,

Jahangir ordered that all water from around Guzargah be diverted to this plot, and a *bagh* built there that 'would have no equal in all the world'. It was named Bagh Jahanara.²² Lahori claimed that a long stone channel diverted water from the Rud-i-Kabul. However, when Shahjahan visited it in 1646, he found the gardens and its environs 'not worthy for his alightment', preferring to spend the month in tents and later in the garden mansion of Bahadur Zafar near Bagh-i Jahanara. He ordered renovations to all existing buildings and gardens. Three additional elevated palaces and pavilions were built in the middle of gardens so that water diverted from the river could flow into cascades, cisterns and water features.²³ The landscape continued to be remodelled with the accretion of buildings in gardens, and undertaken to make the space more congenial for imperial habitation.

Diverting and damming rivers to form lakes were common procedures to shape the natural environment of a garden space. Babur claimed that he diverted the water from the Shi-Yaran spring in the Istalif *chaharbagh*: 'Formerly its course was zigzag and irregular; I made it straight and orderly, so the place became very beautiful.'²⁴ Extensive and invasive procedures such as these, and building tanks, reservoirs and lakes were essentially undertaken to aid cultivation and transformed unfavourable or inhospitable terrains into fertile lands. An added implication was that it enhanced the vistas, an important consideration for the Mughals.

The Bagh Hafiz Ruknah, renamed Aam Khas Bagh, in Sirhind was continuously developed over the years probably after Akbar first encamped there in 1556.²⁵ When the Jesuit priest Fr Monserrate visited and encamped in Sirhind in 1581, he noted its similarity to Memphis in Egypt and described its pleasant gardens and groves, the deep artificial lake filled by irrigation channels and the many parks and gardens that surrounded it.²⁶ Jahangir found the garden 'old', and appointed an architect and horticulturist, Khwaja Waysi, to oversee the revamp of its garden, repairs to its pavilions and construction of an *irqbandi* viewing platform, along with a *hammam* and other buildings in 1619.²⁷ The *Bayaz-i Khwushbu'i*, written c.1642, gives extensive details and dimensions of the elaborate *hammam* architecture and related chambers.²⁸ Several new buildings commissioned by Shahjahan including a *diwan-i khas* (part public audience chamber), *khwabgah* (sleeping apartments) and *jharoka* balcony were completed by 1638. A *mehtabi chabuttra* (moonlit platform) was also built over the newly refurbished tank built by Jahangir.²⁹

Ceremonials to affirm symbolically the absolute authority of the emperor were enacted on a daily basis. These included the daily *darshan* ceremony where the emperor would 'behold' and grant audiences to the nobles and public from the *jharoka* balcony window, an integral architectural feature of Mughal palaces. The typology of buildings situated in garden palaces and hunting retreats and their placement followed a schema that entailed a distinction of public areas (*diwan-i 'am*), part public and accessible to important courtiers (*diwan-i khas*), and strictly private (*zenanaharem*) areas.³⁰ The inclusion of architectural elements such as the audience chambers and the *jharoka* balcony, even in rural palaces, meant that the court could function as normal regardless of setting. Hence the creation of gardens not only entailed subduing nature but also were useful instruments to establish courtly rituals and hierarchy. These elements are also seen in the creation of *shikargahs* and discussed at length below.

MUGHAL HUNTING CULTURE

Mughal emperors often embarked on extended tours with their entire court and bureaucracy, referred to as 'hunting expeditions' in Mughal chronicles, or '*sair u shikar*' meaning 'touring and hunting'. But the real purpose seems to have been to consolidate their authority over vast territories, intimidate restive provinces, lead military





Figure 1. Emperor Babur supervising the construction of the Bagh-i Wafa. The double-page composition depicts an enclosed garden with a cross-axial layout and pool, surrounded by orange and pomegranate trees; from an illustrated *Babur Nama* (c.1590), by Bishandas. Courtesy: Victoria and Albert Museum, London, IM.276A-1913 and IM.276-1913

campaigns, inspect agricultural lands and assess the conditions of their subjects without intermediaries. Abu'l Fazl noted, 'He [Akbar] always makes hunting a means of increasing his knowledge.'³¹ Emulating their Timurid ancestors, the emperors led nomadic lifestyles as they travelled between the capital cities of Agra, Delhi and Lahore, the Kashmir valley in the summer months, and beyond to distant provinces, encamping in gardens and *shikargahs*, while hunting en route. Abu'l Fazl described the multitudes that appealed to Akbar for justice, advice and enlightenment:

But when His Majesty leaves Court, in order to settle the affairs of a province, to conquer a kingdom, or to enjoy the pleasures of the chase, there is not a hamlet, a town or a city that does not send forth crowds of men and women with vow offerings in their hand, and prayers on their lips, touching the ground with their foreheads, praising the efficacy of their vows, or proclaiming the accounts of the spiritual assistance received.³²

While the Mughal emperors hunted deer, antelope, nilgais, black buck, boars, wild ass, buffalo, smaller game and birds, they had a penchant for big game such as lions and tigers, a sport which was seen as an imperial prerogative. Sir Thomas Roe, the ambassador of King James I to the Mughal court, noted the exclusivity of hunting lions as he had to get permission from Jahangir in 1617 before he could kill one that posed a danger to humans and livestock.³³ The emperors also captured cheetahs and wild elephants, which were useful animals during hunting and on the battlefield. Jahangir ordered detailed lists of game taken to be compiled by his huntsmen and scouts after every hunt. He accounted for 28,532 animals, including big game, and 13,964 birds taken in his presence from the age of twelve until his fiftieth year.³⁴

The emperors used a variety of hunting techniques. The *qamargha*, or ring-hunt, a favoured hunting tradition with Chinggisid and Timurid origins, was a huge spectacle that involved thousands of animals driven in by beaters from surrounding areas into a specially created and steadily decreasing circular enclosure formed by fences (*shakhbandh*), screens (*sarapardah*), nets (*badar*) or even human chains in the *shikargah*. Abu'l Fazl boasted: 'if all the faithful servants of the court who were associated with hunting should be added up, they would be enough to conquer the world'.³⁵ Akbar's march to capture the supposedly unassailable Ranthambhore fort, for instance, began as a hunting expedition.³⁶ The double-page composition by Mukund shows Akbar participating in a *qamargha* in the preferred *shikargah* of Palam, Delhi, in 1568, en route to Ranthambhore (Figure 2). That Akbar chose to hunt in a *qamargha*, a technique perfected by his illustrious forebears, on the eve of an important battle had particular gravity. The hunt came shortly after the fall of the decisive fort of Chitor in 1567 in which thirty thousand Rajput forces were killed by the victorious Mughal army, and a show of strength in the Palam *qamargha* was a pretext to move thousands of troops towards the restive Ranthambhore fort and served to send overt warnings to potential rebels, while assessing battle-readiness of his armies and boosting their morale and psyche.³⁷

The decoy-drive hunt, *shikar-i ahū ba ahū*, entailed using cattle and tame antelope as decoys to lure wild antelope.³⁸ Abu'l Fazl noted in detail the complex preparations involved at every stage of the hunt.³⁹ In the Chester Beatty image *Aurangzeb Hunting Nilgai*, the emperor and nobles camouflaged in khaki clothing are shown holding decoys and branches in the centre, while beaters drive the wild nilgais towards the waiting prince (Figure 3). The group of courtiers and grandees have taken their seat at the appropriate distance from the action as noted by Abu'l Fazl, while the musicians entertain the imperial hunting party. A great number of footmen discreetly lining the hunting area, horsemen, and courtiers seated on elephants seen at the upper left ensure that the game

does not escape and attest to the fact that the hunting apparatus involved large numbers of personnel and resources.

The array and great quantities of game for the chase resulted in over seventy hunting grounds designated as imperial *shikargahs* across the realm and included divergent terrains and habitats. One remarkable aspect of the landscape of the Indian subcontinent is that dramatic changes in terrain occur within short distances.⁴⁰ In 1620, Jahangir undertook a long journey from Lahore to Agra which lasted two months and ten days, covered in forty-nine marches and twenty-one halts. It included stays at several favoured *shikargahs* including Bhimbar, Girjhak, Makhiyala, Jahangirabad, Sirhind, Salimgarh and Palam. Jahangir noted that 'not one day had passed, neither marching nor halting, and neither on dry land nor on water, without hunting'.⁴¹

Proximity of *shikargahs* and wildlife to major cities was another feature of the subcontinent which never ceased to amaze visitors to the country even as late as the mid-nineteenth century.⁴² Delhi lies at the foothills of the Aravalli range, which was home to large antelope and tiger populations, while the riverside swamps nearby were also natural habitats to a variety of game.⁴³ In the environs of Delhi were several Sultanate-era (1192–1526) *shikargahs*, such as Bhuli Bhaktiyar, Malcha Mahal, Kushk Mahal, the Lodi tombs area and Mahipalpur, which were used by the Mughal emperors, as well as the favoured Mughal *shikargahs* of Palam and Salimgarh. Bernier described the zealously guarded private hunting grounds of the emperor and their proximity to urban situations in great detail:

In the neighbourhoods of *Agra* and *Debli*, along the course of the *Gemna*, reaching to the mountains, and even on both sides of the road leading to *Labor*, there is a large quantity of uncultivated land, covered either with copse wood or with grasses six feet high. All this land is guarded with utmost vigilance; and excepting partridges, quails, and hares, which the natives catch with nets, no person, be he who he may, is permitted to disturb the game, which is consequently very abundant.⁴⁴

THE FAVOURED SHIKARGAH AND GARDEN ASSOCIATIONS

'*Shikargah*' is the most frequently used term to indicate a hunting ground in Mughal chronicles; there are also occasional references to '*nakhchirgah*' to indicate grounds where '*nakhchir*' or 'prey' was hunted. '*Shikar gauhay muqarrar*' or *saidgah-i muqarrar* are used to describe hunting grounds that were 'favoured', 'established' and 'frequented'. *Shikar gauhay muqarrars* are also referred to as '*shikar-manzil*' or '*manzil-gah*' meaning 'halting place', which indicates that *shikargahs*, like garden spaces, were places to halt with the royal entourage during tours. The procedures to turn a potential site for development into a *shikar gauhay muqarrar* which the emperors used on a regular basis required alterations to the environment that were perceived as acts of subduing nature. They typically involved some tactful clearing of forests, diverting and damming rivers, constructing *hauz/italab* (tanks), and *bunds* (reservoirs) and building hunting *mahals* (lodges or palaces). Such modifications to the landscape, whether to create hunting grounds that would be favoured and frequented, or garden palaces, were seen as necessary processes to mark their territory and claim control over specific geographical areas. For instance, in February 1614 Jahangir hunted nilgais in the ravines of Taragarh Hill, near Ajmer, encamping by the site of a natural spring called Hafiz-Jamal for eight days. Noticing its potential for development he ordered a structure be built when he returned in November of the same year. He claimed that within a year it had been turned into 'a real place, the likes of which world travellers could not point to'.⁴⁵ This included elegant pavilions built on two terraces by a pool measuring thirty metres square, with complex



Figure 2. Emperor Akbar participates in a *qamargha* hunt in Palam, Delhi, in 1568. The double-page composition depicts Akbar pursuing game in the hunting circle formed by courtiers and beaters; from an illustrated *Akbarnama* (c.1586–89), painted by Mukund, with Narayan and Manohar. Courtesy: Victoria and Albert Museum, London, V&A IS.2:70-1896 and IS.2:71-1896





Figure 3. *Aurangzeb Hunting Nilgai* (c.1660). The composition depicts Aurangzeb's extended hunting entourage comprising footmen, horsemen and elephants at upper left and upper centre, discreetly surrounding the camouflaged royal party engaged in a decoy hunt, to ensure the prey does not escape. Courtesy: Chester Beatty Library, f. 11A.27

water features and fountains of which only a high masonry portal framing the spring is extant.⁴⁶ Jahangir visited this *shikar gauhay muqarrar* and halting place, renamed Nur Chashma, thirty-eight times during his three-year stay in Ajmer (1613–16).⁴⁷

One of the better preserved hunting palaces is Lal Mahal in Bari, a *shikar gauhay muqarrar* near Dholpur which was developed by Shahjahan in 1634–36 (Figure 4). The *shikargah* had been used by Babur, Akbar and Jahangir as it was renowned for excellent big game.⁴⁸ The Bari *shikargah* was the scene of a dramatic encounter when the young Shahjahan rescued the Hindu courtier Anup Rai from the clutches of a lion in a daring personal combat while hunting with his father Jahangir in 1610.⁴⁹ The Lal Mahal complex consists of four palace structures, an unusual sunken *hammam* with arcades, and several pavilions and courtyards surrounding the substantial Shahi Talab, a reservoir created by diverting and damming water from the Chambal River. The main palace is an elaborately decorated, symmetrical structure enclosed by a wall comprising three main courtyards, residential quarters and several courtyards and rooms for services. The *jharoka* balcony covered with a curved roof (*bangala*) is sited in the centre of the west facade. The *diwan-i am*, *diwan-i khas* and *zenana* areas are separated by decorated walls and formal *chaharbagh*-type gardens with ornamental water channels set within the courtyards. The *zenana* area has a *baradari* pavilion with vistas of the *talab*, and *hammams*.⁵⁰ The same typological arrangement of buildings that reflect hierarchy and fulfil the requirements of staging important courtly rituals seen in garden settings are also present in *shikar gauhay muqarrars*.

Additionally, shared design features provided a spatial link between *shikar gauhay muqarrars* and garden spaces. These include plantings that contained similar elaborate horticultural and agricultural components, and hard landscaping such as *baradari* pavilions and loggias, ornamental water features, tanks, portals and viewing platforms (*irqbandi*). For instance, Jahangir developed the Hiran Minar *shikargah* in Jahangirabad, now Sheikhpura, in Lahore in 1607, which became a *shikar gauhay muqarrar* (Figure



Figure 4. Lal Mahal Palace in Bari, Rajasthan, India, front facade of the main palace. The hunting palace was developed by Shahjahan in 1634–36. Photo: author, October 2015



Figure 5. Hiran Minar complex, Jahangirabad in Lahore, now Pakistan. The favoured hunting complex comprising a large tank, retreat pavilion and tower was developed by Emperor Jahangir in 1607. Photo: A. Zafar, January 2015

5). Several additions were made by Shahjahan. The complex comprises a substantial man-made rectangular tank of water, a tower, a *baradari* pavilion at the end of a causeway and four corner pavilions. A village, a ‘strong’ fort and other public works were gradually accreted.⁵¹ The tank was watered by irrigation canals, and surrounded by scrub vegetation, which was home to large herds of deer and antelope. Beyond the scrublands were agricultural fields. While not a garden in the conventional sense, several features and functions link it to one. Its imperial buildings and other public works on site, the formal layout of the tank, its use as a halting place, or *manzil-gah* and encampment, and its amalgamation with agricultural fields are all features, functions and design elements shared by Mughal garden spaces.

HUNTING IN GARDEN CONTEXTS

There are numerous allegoric references to the *shikargah* as gardens. During his 1617 tour from Ajmer to Mandu, Jahangir and his entourage travelled through lush countryside, halting on the banks of lakes, *bunds*, irrigation canals and flowering poppy fields; the tour lasted four months and four days, during which he hunted every single day, famously remarking: ‘the arduousness of travelling was never felt. It was as if we were progressing from garden to garden’.⁵² Qandahari noted that when Akbar travelled from Fatehpur Sikri to Ajmer, hunting on the way, ‘the hand of the Almighty had, in order to preserve the honour of gardens produced green grass and flowers on the hunting ground’.⁵³

Several anecdotes in Mughal chronicles directly relate to hunting in garden-agricultural contexts by all the emperors, where agrarian spaces became temporary *shikargahs*. Babur noted the imperial Timurid practice of encamping in *quruqs* during the summer months. *Quruqs* were large, fenced grain fields and meadows that were protected hunting preserves. The Kan-i Gil *quruq* in Samarqand with the Qara Su river flowing through it and the Khan Yurti were ‘excellent’ *quruq* in Mawarannah (Transoxiana).⁵⁴

Chaghatay and Mongol sources, such as Rashid al-Din's *Jami al-Tawarikh*, note that *quruqs* were protected spaces used as pasturelands, hunting preserves and royal burial grounds.⁵⁵ The *quruq* hunting ground is also mentioned as part of the great *chaharbagh* gardens in Timurid writings; the hunting lodges and pavilions were set in garden complexes and situated in or next to *quruqs*.⁵⁶ The *quruq* was thus a reference point for the close spatial and cultural ties between the *shikargah* and garden. Hunting in garden contexts seems to have been a widespread occurrence throughout Central Asia in the early seventeenth century as suggested by Mahmud Amir Wali in the *Bahr al-asrar*. Wali's patron Nasr Muhammad had eight hunting lodges in Balkh that were set in gardens containing fruit trees and flowering shrubs.⁵⁷

During the August 1607 tour of Afghanistan, Jahangir and his army were encamped at Babur's acclaimed garden, the Bagh-i Wafa near Jalalabad in Ningnahr province, for ten days. Jahangir mentioned hunting 'between Bagh-i Wafa and Nimla', including a *qamargha* in the nearby Arzina hunting plain. Ningnahr province was a flourishing agricultural belt comprising working gardens and orchards of citrons, oranges and pomegranates, and cash crop fields of wheat, corn, barley and rice.⁵⁸ That Jahangir managed to bag three hundred animals, including red and white antelope, and capture a leopard, rare in those parts, demonstrates the interaction between the *shikargah* and garden denotations.⁵⁹

Dahra Bagh, later renamed Nur Manzil Bagh, in Agra was a celebrated hunting garden and a favoured halting place. Jahangir and Shahjahan encamped and hunted here on many occasions.⁶⁰ Jahangir noted that in 1619 Dahra had an area of three hundred and thirty *jaribs* in *gaz-i-ilahi* (about one hundred and ninety-eight acres) and that the garden had fine buildings, pavilions, terraces and pools fed by an irrigation canal which brought in water from twelve large wells, whose water was drawn continuously by thirty-two pairs of oxen.⁶¹ The *Bayaz-i Khwushbu'i* further categorizes Dahra Bagh in agricultural contexts, and that it was also allotted a specified number of gardeners, heads of cattle and buckets for use in tilling, drawing water and other agricultural needs in proportion to its land area. This theoretically amounted to three hundred gardeners, fifty-four buckets and one hundred head of cattle, although the actual allocated figures were somewhat fewer according to the *Bayaz*.⁶²

A further link between the hunting ground and extended garden spaces can be seen in the creation of the *bund*. *Bunds*, or reservoirs, were primarily built to support agriculture, and an essential part of the extensive network of irrigation canals bringing water to arid lands by damming and diverting rivers.⁶³ As such they involved modifications to the landscape and its milieu. Water supply also sustained an abundant wildlife near *bunds*, which afforded the Mughal emperors much pleasant hunting. This was followed by infrastructure projects such as palaces, mosques, gardens, smaller palaces for courtiers and public works to complement increased cultivation and the resulting population growth. Ana Sagar, Pushkar and Nalchha were some of the many *bunds* around which cultivation and architectural infrastructures developed and were fertile hunting grounds.⁶⁴ Peter Mundy mentioned a *bund* in Bagh-i Shahdara, near Agra, where the 'kinge doth usuallie pitch his Tent to take his pleasure of fowlinge and fishing, there beinge great store of both in the said Tancke'.⁶⁵ Hunting thus became a successful consequence of irrigation policies.

THE ENCAMPMENT AND ITS LINKS TO THE SHIKARGAH AND GARDEN

The nature of Mughal courtly and administrative culture necessitated frequent and extended tours of the empire and the entire court and bureaucracy moved with the

emperor, as discussed above. *Shikargahs* and gardens en route doubled as encampments sites. The imperial retinue resided in one of many hunting and garden palaces, which were also called *manzil-gah* or halting places; or the imperial entourage camped in huge tented cities that would be assembled by the advance camp called the *peshkhana* on the site of gardens and *shikargahs*. The tents and pavilions were laid out in the same hierarchy seen in palace structures with delineated spaces for the *diwan-i 'amm*, *diwan-i khas* and the *zenanaharem*, which required much planning and management.⁶⁶ Attilio Petruccioli noted that the encampment was an intermediary zone that linked the garden with the larger landscape, and that this relationship had ramifications for other acts of appropriation and settlement in the same territory.⁶⁷ By extension, a three-way link can be seen in garden, *shikargah* and encampment in terms of design where courtly hierarchy could be established while concurrently subduing wild nature. The large grounds of the Hasanabdal hunting garden, for example, on the site of a natural lake near Attock, was used by Akbar, Jahangir, Shahjahan and Aurangzeb as an encampment for their armies and as a halting place en route to the important provinces of Kashmir and Kabul on numerous occasions (Figure 6).⁶⁸ All four emperors mentioned staging successful *qamarghas* in Hasanabdal. Fruits from its orchards and fish from its huge lake could feed the entire army. It was also the site of important ceremonials. Shahjahan ordered several new buildings to be constructed and renovated existing ones in the garden. These included ornamental tanks, *baradari* pavilions decorated with stucco, terraces, *hammam*, gateways, towers and extensive water channels.⁶⁹ Structural associations between the three components of landscape, namely garden, *shikargah* and encampment are thus clearly realized in Hasanabdal.

Courtly ceremonials and rituals such as the *darshan* were enacted even at encampments sites in *shikargahs* and gardens. *Jharokas* featured not only in rural hunting retreats and garden palaces but also in tented pavilions erected on *shikargahs* and gardens. Relationships and loyalty ties were further cultivated in *shikargahs* and gardens by feasts and entertainments during and after the hunt, and during festivities such as Nauroz and 'Eid, and the symbolic weighing ceremony to commemorate the solar and lunar birthday where the emperor was weighed in gold and other precious items that were distributed to charity.



Figure 6: *Baradari* pavilions by the main tank in the Hasanabdal hunting garden in Pakistan. The garden was a favoured *shikargah* and *manzil-gah*. Photo: A. Zafar, January 2015

The departure and return of the imperial expedition, the ‘Sublime Cortege’, waited on the site of *shikargahs* and gardens on the outskirts of the capitals until an auspicious time was chosen by the astrologers for the grand exit or entry. Peter Mundy witnessed a grand procession of Shahjahan and his entourage moving from the Dahra Bagh hunting garden into Agra in June 1632. He noted:

a great number of Eliphants, Cammells, Carts, and Coaches laden with lumberment, which came from the laskerre, or Campe, also many Coaches, Palanqueens and doolees with woemen [...] for all the face of the earth soe farr as wee could see, was covered with people, troops of horses, Eliphants, etts., with innumerable flags small and great, which made a most gallant shew [...].⁷⁰

The encampment was also a venue from which to conduct courtly activities, dispense justice, entertain diplomats, and receive gifts and tributes. These functions linked the *shikargah* and garden to the bureaucracy and administration of the empire, and as such, these spaces cannot be seen as isolated entities in Mughal society. For instance, while encamped at the Rupbas *shikar gauhay muqarrar* on the 19 January 1645, Shahjahan made state appointments, promoted the worthy and presented gifts of robes and elephants, received tributes, despatched an expedition, arranged for the treatment of a sick relative, and managed to bag three lions on site.⁷¹ Shared experiences, dynamics and common territorial functions, rituals and courtly duties enacted in the encampment thus suggest that the Mughal *shikargah* seamlessly integrated and interacted with the expanded model of the garden.

CONCLUSIONS

The Achaemenid *pairidaeza* park had negotiated spaces for the hunting ground and the garden. Over time, the formal structure and metaphorical aspects of the Perso-Islamic *chaharbagh* garden were favoured over other elements, and the garden became largely sedentary in function. The hunting ground became just that, a site to hunt. This paper provides evidence that with the Mughals there was a reconnection between the garden and *shikargah*. To explore the link between the two spaces requires a reinterpretation of what constituted a ‘Mughal garden’. The Mughals intended their garden to be more than just a paradisiacal space used in pleasure and funerary contexts. It was also meant to incorporate working orchards, agricultural lands, and areas for encampment and halts. Many of these spaces were also assimilated in the institution of the *shikargah*. By examining how these landscape narratives communicated dynamics and experiences, their dialogue with related spaces becomes clearer. *Shikar gauhay muqarrars* had similar design elements of Mughal garden denotations. Hunting also took place in garden contexts as seen in the *quruq* and other spaces categorized as gardens. The creation and utilization of both spaces involved appropriation and refashioning of nature and interactions with the larger landscape. The encampment and the many activities that were experienced on site suggest that the *shikargah* was not spatially and culturally isolated from related spaces that included the Mughals’ perception of the garden. The implication here is that the *shikargah* as a medium of studying landscape can set new parameters for garden research.

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¹ Babur was a sixth-generation heir to the Timurid throne who was forced out of his ancestral homeland and patrimony. He was also related to Chinggis Khan on his maternal side.

² Shaha Parpia, ‘Reordering nature:

power politics in the Mughal *shikargah*’, *International Journal of Islamic Architecture*, 7/1 (forthcoming 2018). For discussions on the political and social significance of the hunt in various ancient and medieval Asian societies,

see Thomas T. Allsen, *The Royal Hunt in Eurasian History* (Philadelphia: University of Pennsylvania Press, 2006). See also Anand Pandian, 'Predatory care: the imperial hunt in Mughal and British India', *Journal of Historical Sociology*, 14/1 (2001), pp. 79–107.

³ The Mughals had an extensive tradition of historiography. Discussions of the Mughal hunting culture, details of features, functions and landscape modifications of the garden and *shikargah* are based on Mughal primary sources that include memoirs, panegyric biographies by court historians, administrative gazetteers, biographical compilations of Mughal officials, legal and narrative texts, imperial newsletters, and travelogues by European travellers to the Mughal courts. Contemporary secondary sources have been used in a supportive capacity.

⁴ Throughout, any references to garden spaces are seen from Mughal garden perspectives rather than prevailing definitions of Western garden art. The term 'garden' should therefore be read as encompassing larger garden spaces, such as cultivated lands, meadows and orchards; John Dixon Hunt, *Greater Perfections, The Practice of Garden Theory* (London: Thames & Hudson, 2000), p. 29. Hunt, writing with reference to Western garden art, noted that gardens can be broadly defined as enclosed structures, concerning a concentrated aspect of place-making, where the enclosure not only distinguishes it from its surroundings such as fields, but also allows for an organization of these interior spaces. He also noted that this perception is the starting point of Renaissance garden theory and its emphasis on formal aesthetics.

⁵ Xenophon, *Anabasis*, trans. Carleton L. Brownson (Cambridge, MA: Harvard University Press, 1992), I-2, p. 7, and I-4, pp. 9–11.

⁶ Ralph Pinder-Wilson, 'The Persian garden: *Bagh* and *Chaharbagh*', in Elisabeth B. Macdougall and Richard Ettinghausen (eds), *The Islamic Garden*. Dumbarton Oaks Colloquium on the History of Landscape Architecture IV (Washington, DC: Dumbarton Oaks, 1976), pp. 69–85 (pp. 72–3).

⁷ For discussions on the evolution of the Persianate paradise gardens, see Donald N. Wilber, *Persian Gardens and Garden Pavilions* (Washington, DC: Dumbarton Oaks, 1979). See also Elizabeth Moynihan, *Paradise as a Garden in Persia and Mughal India* (London: Scolar, 1980); and Mohammad Gharipour, *Persian Gardens and Pavilions: Reflections in History, Poetry and the Arts* (London: I. B. Tauris, 2013).

⁸ For details on the extended Timurid garden, see M. E. Subtelney, 'A medieval Persian agricultural manual in context: the *Irshad al-zira'a* in late Timurid and early Safavid Khorasan', *Studia Iranica*, 22/2 (1993), pp. 167–217.

⁹ Zahiruddin Muhammad Babur Padshah Ghazi, *Babur-Nama, The Memoirs of Babur*,

trans. Annette Susannah Beveridge (New Delhi: Munshiram Manoharlal, 1921; repr. 1990), p. 532.

¹⁰ The term '*chaharbagh*' (literally a four-part garden) generally refers to a walled, architectural garden with a quadripartite layout and a pavilion on a raised platform called *kursi*; the main water channel flanked by paved walkways called *kbiyaban* divided the garden into halves and flowed into the pool; each half was further subdivided into terraces by criss-crossing water channels, and filled with trees, flowers and herbs. This is the description seen in the last chapter of the *Irshad al-zira'a*, an agricultural manual inspired by the work of Mirak-i Sayyid Ghiyas, an acclaimed Timurid landscape architect and completed in Herat in 1515 by Qasim b. Yusuf Abu Nasri; M. E. Subtelney, 'Mirak-i Sayyid Ghiyas and the Timurid tradition of landscape architecture: further notes to "A medieval Persian agricultural manual in context"', *Studia Iranica*, 24 (1995), pp. 19–60 (pp. 38–9). A '*bagh*' is a generic term for garden that integrated several related spaces such as meadows, orchards and agricultural lands, and often monumental in size. However, there was often no clear-cut distinction between the two. Babur referred to at least five gardens in the *Babur-Nama* as *chaharbaghs*, although their names suggest they were *baghs*. The Bagh-i Maidan, Bagh-i Jahanara, Bagh-i Wafa, Bagh-i Hasht Bihisht and Bagh-i Nilufar were referred to as *chaharbaghs*, and all had varying and including irregular layouts; Babur/Beveridge, *Babur-Nama*, pp. 80, 305–6, 208, 531–33, 606.

¹¹ *Ibid.*, n. 4, p. 5.

¹² R. D. McChesney, 'Some observations on "garden" and its meanings in the property transactions of the Juybari family in Bukhara, 1544–77', in Attilio Petruccioli (ed.), *Gardens in the Time of the Great Muslim Empires, Theory and Design* (Leiden: Brill, 1997), pp. 97–109 (pp. 100–4).

¹³ Subtelney, 'Medieval Persian agricultural manual', pp. 185, 187. See also James L. Wescoat, 'Gardens versus citadels: the territorial context of early Mughal gardens', in John Dixon Hunt (ed.), *Garden History: Issues, Approaches, Methods, Colloquium on the History of Landscape Architecture* (Washington, DC: Dumbarton Oaks, 1992), pp. 331–58. Wescoat noted that Timurid and early Mughal orchards resembled gardens as they had similar scale, vegetation and degree of enclosure as gardens, but lacked some ceremonial functions of gardens and meadows. He also noted that 'gardens were a type of middle landscape – a synthesis of meadow and orchard', p. 345.

¹⁴ Abu'l Fazl, *A'in-i Akbari*, trans. H. Blochmann, 3 vols (Calcutta: Asiatic Society, 1866–94; repr. 2010), II, p. 246. See also Abu'l Fazl, *A'in-i Akbari* (Persian), ed. H. Blochmann, 3 vols (Calcutta: Asiatic Society of Bengal in the Bibliotheca Indica, 1872), II, p. 485. Abu'l

Fazl, author of *A'in* and *Akbarnama*, was Emperor Akbar's historian and confidant. *A'in* is an imperial manual and gazetteer. One *kos* is approximately four kilometres.

¹⁵ Babur/Beveridge, *Babur-Nama*, p. 208.

¹⁶ *Ibid.*, pp. 394, 414.

¹⁷ Augustin Berque, *Médiance: De Milieux en paysages* (Montpellier: Reclus, 1990), cited in Hunt, *Greater Perfections*, p. 8. Hunt noted that Berque's concept of milieu suggests that societies have always intervened in their immediate environment to create suitable surroundings, and that the production of 'landscape', 'whether urban, suburban, or rural, is not simply a question of environment (or environmentalism), but the mediation of environment'. A milieu is not just objective, physical surroundings, but involves 'the inscription on that site of how an individual or a society conceives of its environment'. This argument is relevant in Mughal contexts.

¹⁸ Babur/Beveridge, *Babur-Nama*, pp. 531–2.

¹⁹ *Ibid.*, p. 532.

²⁰ *Ibid.* Babur claimed that by good water management and engineering, he was able to make waters flow, construct planned and orderly gardens with attractive planting, and buildings to make the previously 'ugly' spaces in Agra habitable and beautiful.

²¹ For the memoirs of Emperor Nuruddin Jahangir Padshah, see Henry Beveridge (ed.), *Tuzuk-i Jahangiri or the Memoirs of Jahangir*, trans. Alexander Rogers, 2 vols (New Delhi: Munshiram Manoharlal, 1909; repr. 2003); *Jahangirnama, Memoirs of Jahangir, Emperor of India*, trans. Wheeler M. Thackston (New York: Oxford University Press, 1999); and Syed Ahmad Khan (ed.), *Toozuk-i-Jehangeeree* (in Persian) (Aligarh: Aligarh, 1863–64). See also Jahangir/Beveridge, *Tuzuk*, I, p. 106. However, Lahori, Shahjahan's historian, claimed the garden was laid out by Babur; Abdul Hamid Lahori, *Padshahnamah*, trans. Hamid Afaq Siddiqi, 2 vols (Delhi: Idarah-i Adabiyat-i Delli, 2010), II, pp. 231–2.

²² Jahangir/Beveridge, *Tuzuk*, I, p. 106.

²³ For details on the architecture of the two palaces and gardens, see Lahori/Siddiqi, *Padshahnamah*, II, pp. 231–2.

²⁴ Babur/Beveridge, *Babur-Nama*, p. 216.

²⁵ Abu'l Fazl, *Akbarnama*, trans. H.

Beveridge, 3 vols (Kolkata: Asiatic Society, 1907; repr. 2010), II, p. 51. See also Subash Parikar, 'A little-known Mughal garden in India: Aam Khas Bagh, Sirhind', *Oriental Art*, 31/4 (1985–86), pp. 421–2.

²⁶ A. Monserrate, *The Commentary of Father Monserrate SJ on the Journey to the Court of Akbar*, trans. J. S. Hoyland, annotated S. Banerjee (London: Humphrey Milford/Oxford University Press, 1922), p. 102.

²⁷ Jahangir/Beveridge, *Tuzuk*, II, p. 113.

²⁸ Cited in Gauvin Bailey, 'The sweet-smelling notebook: an unpublished Mughal source on garden design', in Petruccioli, *Gardens in the Time of the Great Muslim*

Empires, pp. 129–36 (p. 132). The *Bayaz-i Khwushbu'i* (meaning 'sweet-smelling notebook') written by an anonymous source during the early Shahjahan period is a manual on the practical organizational requirements of a Mughal nobleman. One chapter is devoted to gardens and related buildings.

²⁹ Lahori/Siddiqi, *Padshahnamah*, I, p. 185; II, p. 37; Jahangir/Beveridge, *Tuzuk*, II, p. 113.

³⁰ *Diwan-i 'am* is the public audience chamber; *diwan-i khas* is the part-public audience chamber open only to select courtiers; *zenana* and *harem* are women's quarters.

³¹ Abu'l Fazl/Blochmann, *A'in*, I, p. 292.

³² *Ibid.*, p. 173.

³³ Thomas Roe, *The Embassy of Sir Thomas Roe to the Court of the Great Mogul 1615–1619 as narrated in his Journal and Correspondence* by W. Foster (Oxford: Oxford University Press, 1926), p. 365.

³⁴ Jahangir/Beveridge, *Tuzuk*, I, p. 369.

³⁵ Abu'l Fazl/Beveridge, *Akbarnama*, II, p. 442.

³⁶ *Ibid.*, II, pp. 489–97.

³⁷ For details of the Chitor fort siege, see Abu'l Fazl/Beveridge, *Akbarnama*, II, pp. 442, 464–80.

³⁸ Abu'l Fazl/Blochmann, *A'in*, I, pp. 301–2. Abu'l Fazl discussed the decoy hunt and several other hunting techniques in detail (pp. 292–305). See also Ebba Koch, 'Dara-Shikoh shooting nilgais: hunt and landscape in Mughal painting', *Freer Gallery of Art Occasional Paper*, 1 (1998), pp. 11–58. Koch noted that the decoy hunt found much favour with the princes not entitled to hold a *qamargha* (p. 24). The 'Dara-Shikoh' paper is a detailed study of the pictorial depiction of the imperial hunt particularly during the Shahjahan era.

³⁹ Abu'l Fazl/Blochmann, *A'in*, I, pp. 292–3. Abu'l Fazl noted that the beaters employed by the *Mir Shikar* (master of the hunt) surrounded the *shikargah*, and the *qur* (ceremonial weapons and insignia and flags) remaining at a distance of five *kos* from it; Abu'l Fazl/Blochmann, *A'in*, I, p. 116. Near the *qur*, grandees and servants of the hunt took their places at a distance of one-and-a-half *kos*, while a vigilant officer and his team of infantry also stood guard, followed by another experienced officer who superintended the whole.

⁴⁰ Godfrey Mundy, *Pen and Pencil Sketches Being the Journal of a Tour in India*, 2 vols (London: John Murray, 1832), I, pp. 119–22. Mundy, a British Army officer stationed in India in the 1820s, remarked that wide-open savannahs of jungle grass in the dry plains of Rohilcund gave way to luxuriant forests and impenetrable undergrowth in the Himalayan foothills in a single overnight march.

⁴¹ Jahangir/Thackston, *Jahangirnama*, p. 358.

⁴² James Forsyth, 'Game animals and birds of the plains', in Mahesh Rangarajan (ed.), *The Oxford Anthology of Indian Wildlife*, Vol. I: *Hunting and Shooting* (New Delhi: Oxford

University Press, 1999), pp. 36–53 (pp. 47, 52). Forsyth, who visited India in 1857–58, observed many game birds and animals such as nilgais and boars in the neighbourhood of Nagpur.

⁴³ Mahesh Rangarajan, 'Introduction', in Rangarajan, *Oxford Anthology of Indian Wildlife*, p. 2.

⁴⁴ François Bernier, *Travels in the Mogul Empire*, trans. Archibald Constable (London: Oxford University Press, 1934; repr. 1983), p. 375. Bernier was a French physician who visited the Mughal court in 1658–69.

⁴⁵ Jahangir/Thackston, *Jahangirnama*, pp. 155, 162.

⁴⁶ Ebba Koch, 'My garden is Hindustan: the Mughal Padshah's realization of a political metaphor', in Michel Conan (ed.), *Middle East Garden Traditions: Unity and Diversity*. Dumbarton Oaks Colloquium on the History of Landscape Architecture XXXI (Washington, DC: Dumbarton Oaks, 2007), pp. 159–75 (p. 164).

⁴⁷ Jahangir/Thackston, *Jahangirnama*, p. 202.

⁴⁸ For instance, Babur/Beveridge, *Babur-Nama*, p. 585; Abu'l Fazl/Beveridge, *Akbarnama*, I, p. 270; Abu'l Fazl/Blochmann, *A'in*, I, pp. 297, 294; and Jahangir/Beveridge, *Tuzuk*, I, p. 165.

⁴⁹ For details of the Anup Rai incident, see Lahori/Siddiqi, *Padshahnamah*, I, pp. 158–9; and Jahangir/Beveridge, *Tuzuk*, I, pp. 185–6.

⁵⁰ Architectural documentation of the Lal Mahal is based on a field trip to Bari by the author. See also Jeffrey Hughes, 'Shah Jahan's Lal Mahal at Bari and the tradition of Mughal hunting palaces', doctoral thesis, University of Iowa, 1988. *Baradari*, literally twelve doored, generally refers to a pillared pavilion for use in summer.

⁵¹ Jahangir/Beveridge, *Tuzuk*, I, pp. 90–1; II, p. 182. Incidentally, the complex was built in memory of Jahangir's pet antelope. Shahjahan added architectural embellishments to these buildings.

⁵² Jahangir/Thackston, *Jahangirnama*, p. 214.

⁵³ Muhammad Arif Qandahari, *Tarikh-i Akbari*, trans. Tasneem Ahmad (Delhi: Pragati, 1993), p. 190. *Tarikh-i Akbari* is the first chronicle of Akbar's reign.

⁵⁴ Babur/Beveridge, *Babur-Nama*, p. 81. Babur also mentioned that Timur had built a garden in Kan-i Gil which was ruined by the time he visited it (p. 78).

⁵⁵ Devin DeWeese, *Islamization and Native Religion in the Golden Horde, Baba Tükles and Conversion to Islam in Historical and Epic Tradition* (Pennsylvania: Pennsylvania State University Press, 1994), pp. 181–2.

⁵⁶ McChesney, 'Some observations on "garden"', p. 103.

⁵⁷ Mahmud Amir Wali, *Bahr al-asrar*, 4:215a; cited in McChesney, 'Some observations on "garden"', p. 103.

⁵⁸ Babur/Beveridge, *Babur-Nama*, p. 208.

⁵⁹ Jahangir/Thackston, *Jahangirnama*, pp. 85–6.

⁶⁰ For example, Jahangir/Beveridge, *Tuzuk*, I, pp. 182, 232, 234; II, pp. 75–6.

⁶¹ Jahangir/Thackston, *Jahangirnama*, p. 296.

⁶² Cited in Bailey, 'Sweet-smelling notebook', pp. 132, 134–5.

⁶³ For instance, Inayat Khan, *Shahjahan Nama*, trans. A. R. Fuller, ed. W. E. Begley and Z. A. Desai (Delhi: Oxford University Press, 1990), p. 407. Akbar de-silted a canal built by Firuz Shah Tughlaq (1351–88) and added reservoirs, such as at Bhadra; Shahjahan extended it to supply water to the new fort and palace at Shahjahanabad and the *shikar gauhay muqarrars* of Hissar Firuza and Safidun. The canal supposedly revitalized the entire region with cultivation.

⁶⁴ For instance, Jahangir hunted in Pushkar tank eleven times during his stay in Ajmer, 1613–16; Jahangir/Thackston, *Jahangirnama*, p. 202.

⁶⁵ Peter Mundy, *The Travels of Peter Mundy in Europe and Asia 1608–1667*, 5 vols (London: Hakluyt Society, 1924), II, pp. 56–7. Peter Mundy was a British merchant-trader who travelled to the Mughal court between 1628 and 1634.

⁶⁶ For details of hierarchical arrangement of tentage in encampments, see Abu'l Fazl/Blochmann, *A'in*, I, pp. 47–9, 55–7. Specially constructed temporary pavilions known as *chubin rawati* and the double-storied *doshiyana manzil* with deluxe interiors were erected in a grand enclosure following strict protocol regarding the siting of tents of nobles and courtiers, and designated areas for staff and domesticated animals.

⁶⁷ Attlio Petruccioli, 'Rethinking the Islamic garden', in Jane Coppock and Joseph A. Miller (eds), *Transformation of Middle Eastern Natural Environment: Legacies and Lessons* (New Haven and London: Yale University Press 1998), pp. 349–63 (p. 356).

⁶⁸ For instance, Jahangir/Thackston, *Jahangirnama*, pp. 73, 87, 322, 377; and Lahori/Siddiqi, *Padshahnamah*, II, pp. 189, 193, 251. See also Maasir-i 'Alamgiri of Saqi Must'ad Khan, *A History of the Emperor Aurangzib 'Alamgir*, trans. Sir Jadunath Sarkar (Calcutta: Royal Asiatic Society of Bengal, 1947), pp. 82–3.

⁶⁹ For details of the architecture of the Hasanabdal gardens, see Shahid Ahmad Rajput, 'The Mughal garden "Wah" near Hasanabdal: source material, report of excavations of 1993–94 and new discoveries', in Mahmood Hussain, Abdul Rehman and James L. Wescoat (eds), *The Mughal Garden: Interpretation, Conservation and Implications* (Rawalpindi: Ferozsons, 1996), pp. 73–87 (p. 75).

⁷⁰ Mundy, *Travels*, II, pp. 192–4.

⁷¹ Lahori/Siddiqi, *Padshahnamah*, II, pp. 154–5.

CHAPTER 3

Hunting Ground, Agricultural Land and the Forest: Sustainable Interdependency in Mughal India 1526-1707

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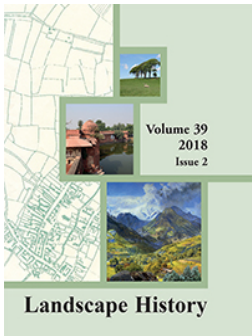
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Signed _____

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Hunting ground, agricultural land and the forest: sustainable interdependency in Mughal India 1526–1707

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ABSTRACT

The Mughal society had two salient characteristics: it was agrarian and had a complex imperial hunting culture. The enactment of cultivation and the hunt, both vital to the state in different respects, transformed the natural environment of forested spaces which were appropriated for cultivation and hunting needs. These needs, along with the prevailing attitudes towards forests as spaces of lawlessness and hostility, generated a demand for deforestation. The paper proposes that this demand resulted in differentiating the 'natural landscape' (the forest) from the 'modified landscape' of the imperial shikargah (hunting ground), which were sited on deforested land at the edge of cultivated spaces. It argues that the Mughals viewed the shikargah as a transitional zone between the cultivated land and the uncultivated forest as it established a continuity between hunting and agricultural practices. Symbolic notions of harmony that were said to exist between the two spaces, and proximity of wildlife and shikargahs to agriculture, formed the basis of this continuity. The paper also proposes that while the cultivated land and shikargah were often seen as conflictual spaces due to the detrimental effect of hunting practices on agricultural growth, they were also seen as mutually beneficial spaces due to the contributions the sophisticated hunting practices made to agriculture. It discusses the various processes through which the Mughal emperor dealt with the dichotomy of imperial hunting practices and its impact on agriculture and forestry. The paper concludes that a sustainable interdependency existed

between these three important components of Mughal landscapes in terms of spatial, cultural and political perspectives.

KEYWORDS

Mughal, *shikargah*, agricultural lands, forests, hunting parks, natural landscape, modified landscape

INTRODUCTION

The Mughal *shikargah*, or hunting ground, shares a close cultural, spatial and functional relationship with Mughal garden connotations. These notions, as well as common ritual and social uses, suggest that the two spaces were conceptualised to integrate (Parpia 2016). The extent of the Mughal Empire, in the Indian subcontinent, founded in 1526, is shown on Fig. 1; at its peak in the seventeenth century it extended over nearly all the of the Indian subcontinent and parts of Afghanistan. In Mughal courtly parlance, the often-used word for garden, *bagh*, encompassed working orchards, agricultural lands, pasturelands and encampment sites. As hunting often took place in hunting gardens such as Dahra Bagh in Agra, many of the garden components were also assimilated in the *shikargah* whose natural environment was completely altered by the

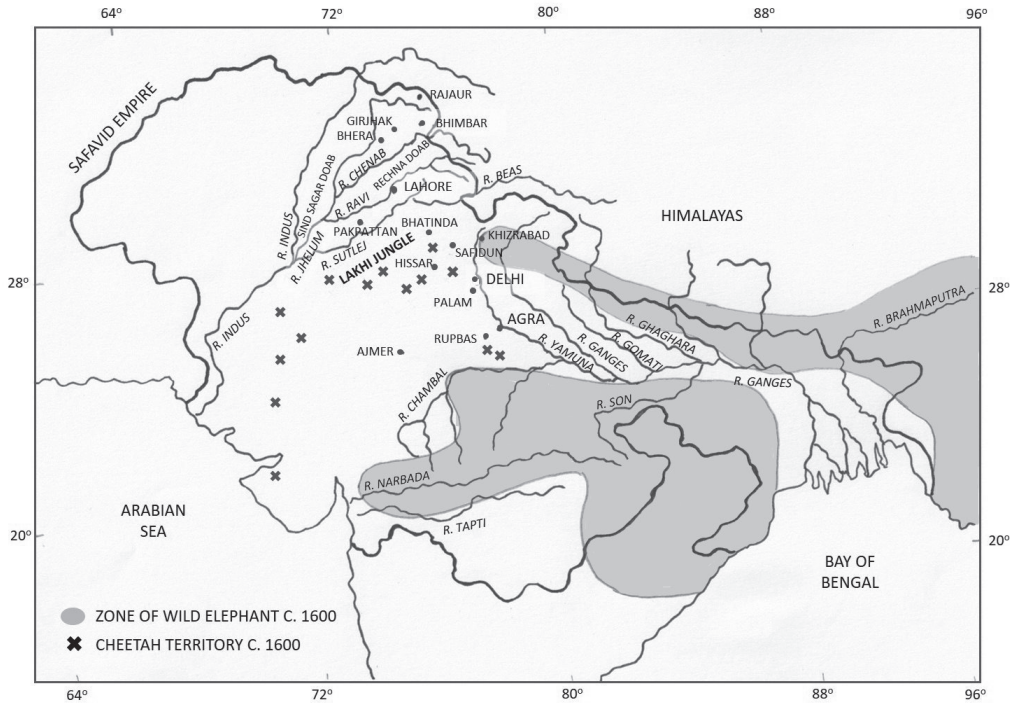


Fig. 1. Mughal Empire – elephant and cheetah habitats c. 1600 (adapted from Moosvi 1989, fig. 4, *Man & Environ*, 14 (2), by kind permission of the editor).

imperial hunters; this space became the *shikargah-i muqarrar*, or the favoured and frequented imperial hunting ground. It is implicit in chronicles and documents that only the altered landscapes of the favoured *shikargabs* carried semiotics of power and control, and were ones where the emperor could meaningfully engage with the peasants and their lands, and mete out justice (Parpia 2018).

The structure of the Mughal state had two noteworthy characteristics among a host of other attributes — the agrarian system which was dependent entirely on the ruling elite's facility to systematically appropriate surplus produce from the peasants through intermediaries such as the *zamindars*,¹ and its subsequent distribution among the ruling class; and the complex imperial hunting culture which was deeply embedded in the socio-political system. The process of cultivation and the enactment of the hunt in their respective spaces, namely the cultivated land and the *shikargah*, both seen as vital to the survival and

growth of the Mughal state in different respects, generated a demand for greater space which could only become available through selective jungle clearance. The natural environment of forested areas was thus appropriated and transformed through deforestation and the addition of features such as irrigation to accommodate the needs of cultivation and hunting. Prevailing attitudes towards forests as hostile and lawless places exacerbated the process.² This paper proposes that the demand for deforestation resulted in a differentiation between the 'natural landscape' of the forest, and the 'modified landscape' of the imperial *shikargah* which was sited on deforested lands at the edge of cultivated spaces. This essay aims to establish the hunting culture in the dialectic of the three important landscape narratives in the Mughal tradition, namely the *shikargah*, the cultivated space and the jungle/forest seen from spatial, cultural and political perspectives.³

The paper also proposes that the Mughals conceptualised the *shikargah* as a transitional zone between the cultivated land and the uncultivated forest as it established a continuity between agricultural and hunting practices. Symbolic notions of harmony that were said to exist between the agricultural land and the *shikargah*, as well as the image of the emperor who assumed the sovereign duties of hunting and cultivation, formed the basis of this continuity and are discussed in the first part of the paper.

The typology, prevailing Mughal attitudes, practices and perception of the three spaces, which do not generally conform to conventional spatial and functional definitions, and the siting of the imperial *shikargahs* in relation to agricultural lands and forests, will be examined in the second part of the paper.

It is also proposed that while the cultivated land and the *shikargah* were often seen as confrontational spaces due to the detrimental effect of hunting practices on agricultural growth, they were also perceived as mutually beneficial territories due to contributions made by the hunting culture to agriculture. Various hunting techniques and practices meant that agricultural lands were under threat due to damage to crops caused by tens of thousands of soldiers and hunt-related personnel trampling on fields *en route* to the *shikargah*, a fact acknowledged by emperors as inevitable. *Zamindars* of the districts concerned were also obliged by court officials to release their agricultural workers in order to provide pressed labour for the visiting imperial hunting party. However, there were various contributions that hunting practices made to agriculture due to the sophisticated nature of the hunting culture. These were related to problem solving in the agricultural sector and are discussed in the third section of the paper, as are the various processes through which the Mughal emperor dealt with the dichotomy of imperial hunting practices and its impact on agriculture.

Mughal irrigation policies exemplify the *shikargah*-agricultural land-forest nexus. Irrigation works were built primarily to support agriculture in arid, often deforested, lands; the creation of

lakes and dams (*bunds*), technological upgrades to existing traditional water systems and the construction of canals not only invigorated cultivation, but also attracted abundant wildlife from the wastelands in the vicinity and many *shikargahs* were created around water bodies. Irrigation policies are analysed in the final section of the paper.

SYMBOLIC LINKS TO KINGSHIP AND JUSTICE

Abu Talib Kalim (*Badshahnama*, fos 282r–282v), one of the Mughal emperor Shah-Jahan's (r. 1628–1659) biographers, famously notes in the *Badshahnama* that when the benevolent emperor hunted, he did so with the intention of capturing both worlds, implying the temporal and spiritual. Justice was the main objective of his hunt, and he was aware of the conditions of the farmers in every region. Whenever he heard of an act of injustice brought to his knowledge by the oppressed, he would interrupt the hunt to personally mediate and redress the complaint so that justice might prevail (cited by Koch 1996, p. 173). Kalim's sentiments thus validate the interrelated concepts of hunting, agricultural practices, justice and kingship in Mughal contexts. Similar ideological notions were already evident at Akbar's (r. 1556–1605) court as noted by Abu'l-Fazl, Akbar's historian and confidant, who justified and legitimised the imperial hunt as occasions to travel *incognito* to ascertain issues of justice and administration, matters related to taxation, and to determine the fairness by which *madad-i ma'ash* (*sayurghal* in Turkic) or revenue-free charitable land grants were allocated and maintained (Abu'l-Fazl, *A'in*, I, p. 292). Mughal writings also acknowledge that imperial hunting practices enabled the emperor to conduct inspections of agricultural lands, and to safeguard peasants from potentially oppressive revenue officials. The fact that hunting expeditions brought the emperor into proximity with his subjects further reinforced the virtue of justice, seen as an essential prerequisite for a ruler. The Mughals hence viewed the *shikargah* as a

transitional zone between the cultivated land and the uncultivated forest as it established a continuity between hunting and agricultural practices. The implication here is the interdependence between cultivated spaces and the hunting ground, and a harmonious relationship between the emperor, the 'just' hunter, and agrarian societies; paintings of this purported symbiosis further strengthened the case of the imperial hunter who nurtured and protected the peasant, and furthered the cause of increased agriculture as a sovereign obligation.

The hunting ground-agricultural space connection was by no means exclusive to the Mughals. The influential ancient Achaemenid (550–330 B.C.) *pairidaeza* or paradise hunting park, was firmly established in the narrative of the cultivated space, as seen in the writings of Xenophon (c. 430–354 B.C.), and the archaeological remains of the palace of Cyrus the Great (559–530 B.C.) in Pasargadae, Iran (Allsen 2006, pp. 48–9). Xenophon notes that Achaemenid kings created 'paradises' in all the districts they visited and resided in, that were 'full of all good and beautiful things that the soil will produce' (*Oeconomicus*, iv: sections 8, 12–14, 20–5). The so-called Persepolis Fortification Tablets excavated in the walls of Persepolis contain further evidence that *pairidaezas* grew and stored agricultural products (*Persepolis Fortification Tablets*, XCII, pp. 15, 113–16). Xenophon also notes that the Achaemenids paid 'close attention to husbandry and the art of war, holding that these are two of the noblest and most necessary pursuits' (*Oeconomicus*, iv: sections 4–5). The walled and extensively irrigated *pairidaeza* is now generally believed to be the schematic model for Timurid and Mughal gardens and the *shikargah-i muqarrar*, the frequented and established imperial hunting park. It was hence a natural progression for the Mughals to similarly assume the duties of hunting and cultivation as necessary elements to kingship that reflected the ideological notions of their illustrious Persian forebears. Comparisons to the celebrated hunts of Cyrus and mythical heroes such as Faridun and Bahram Gur were frequently invoked in Mughal writings and paintings, as were royal concerns for the peasantry. In Pl. I, *Faridun and the Gazelle* from the British Library

Khamsa, the Mughal artist Mukund has illustrated the story of the righteous Persian king Faridun hunting while farmers can be seen tilling their fields in the background. The hunting ground seems to merge seamlessly with agricultural lands. Koch (1996, p. 171) notes that the royal hunter is depicted to resemble Akbar as a subtle allusion to the Mughals' claim of celebrated descent, and to present the narrative of the hunt juxtaposed with rural life as a historical reality.

Ancient Indian writings also suggest the agricultural land-hunting ground-forest nexus. The *Arthashastra* (the science of royal government) written by Kautilya and dating from around the second century B.C. and third century A.D. clearly distinguishes between various types of forests — the king's hunting park which is a dry but irrigated agricultural space filled with game with claws and teeth removed, which should ideally border a larger animal preserve and timber forests; and elephant forests situated along riverbeds or marshy tracts on the borders of the kingdom (Kautilya, *Arthashastra*, II, pp. 59–60). Kautilya also distinguishes between wet and dry lands. Zimmermann (1999, pp. 50, 19, 38, 16), whose work is based on information collated from the *Arthashastra*, *Dharmashastra* (legal codes) and the *Sushruta-sambhita* (c. 600 B.C.) of the physician Sushruta, notes that *jangala* or dry land was highly recommended for cultivation and settlement; its dominant geographical feature was that it represented an expansion of agriculture in the irrigated plains seen as 'uncultivated but available', surrounded by cultivated land, and includes the village world. At its margins was an empty space or wasteland which opened up clearings for human colonisation. The *jangala* was exemplified by the Delhi Doab which is the land between the Sutlej and Yamuna rivers bordered by the Siwalik mountains whose forests, once modified, were fertile hunting grounds for the Mughals. *Anupa* or marshy, mountainous, forested land receives less rainfall than the *jangala* and is therefore not ideal (*ibid.*, pp. 47–9). Agricultural villages were protected by forests at their boundary. Hence the village or countryside was both 'inside' the jungle and 'different' from it: spatially included

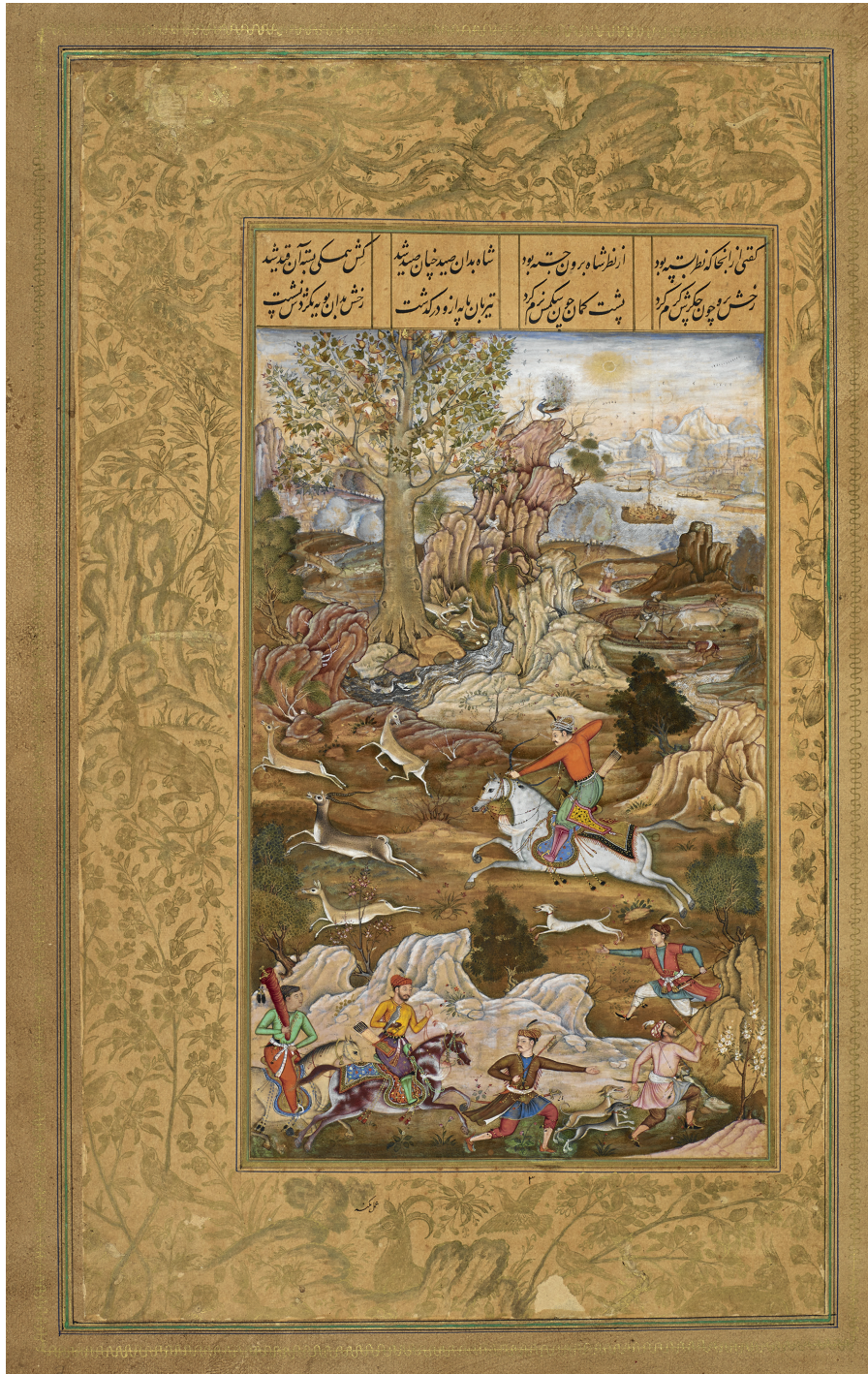


Plate I. 'Faridun and the Gazelle', painted by Mukund India, Mughal, 1595. From a *Khamsa* of Nizami (© The British Library Board, Or. 12208, fo. 19a).

but ecologically separate, indicating that both regions were interconnected (*ibid.*, p. 51).

During the great famine of 1630–2, the worst in Mughal history, and which was compounded by pestilence, over three million people lost their lives in Gujarat and the Dakhin (Foster 1910, p. xxi). Grain which was brought in from Malwa was sold at exorbitant prices, resulting in huge gains for the imperial treasury. Peter Mundy, a British merchant stationed in India in 1628–1634, adds that the supply was also disrupted in order to feed Shah-Jahan's army which was encamped in Burhanpur near the worst-affected areas (Mundy *Travels*, II, p. 56). Although Shah-Jahan's historians Lahori (*Padshabnama*, I, pp. 106–7) and 'Inayat Khan (*Shahjahanama*, p. 42) offer some details regarding the calamity and imperial remedies, Lahori (*Padshabnama*, I, pp. 80–1) is more effusive in highlighting the emperor's lion hunt in Burhanpur in the Bagh-i Zaynabad *shikargah* with the novel use of a net during the height of the famine in 1630. Shah-Jahan's actions seem to have been motivated by the symbolic notions of harmony that was said to exist between the two interdependent spaces, namely agricultural lands and hunting grounds — the emperor was expected to be a champion of both activities in order to fulfil his kingly duties in their entirety.

TPOLOGY OF THE SPACES — ATTITUDES AND PRACTICES

Spatial perspectives of landscapes in Mughal contexts should crucially include environmental concerns and relationships with the broader geographical area surrounding it, a cultural reading of the territory, and how the spaces were interpreted (Wescoat 1992, pp. 331–5). Regarding cultivated spaces, C. Singh notes that, 'For the Mughals, a civilized society was one primarily engaged in agriculture, alongside other more sophisticated commercial activity' (1995, p. 21). Revenue from agricultural lands, mainly derived from peasant earnings, was crucial to the prosperity of the Mughal state. The revenue paid approximated to the peasants' surplus

produce, or whatever was produced in excess of the minimum need for his family's subsistence. According to Hasan (1964, p. 112), the emergence of the money economy led to the extension of the cultivated area partly as a result of the demand for greater revenue. As land revenue was calculated based on reports of assessments of cultivated lands sent in by local officials, and by taking into consideration the autumn harvest and the spring harvest, officials were often unscrupulous with their measurements of what constituted 'cultivated' lands. The total measured area included total area cropped or sown, current fallows and cultivable wastes (Moosvi 1987, p. 41). According to the *Nigarnama-i Munshi*, for instance, it was a standing complaint during Aurangzeb's reign (r. 1658–1707) that in addition to cultivated land, local officials also measured land deemed cultivable and this includes land under habitation, tanks, nullahs, rivers, hill and jungle (cited by Habib 1963, pp. 5–6). The indication here is that forests at the edge of cultivation were deemed cultivable, providing a further link to the agricultural land-hunting ground association.

Abu'l-Fazl also adds, 'he [the peasant] should strive to bring waste land into cultivation and take heed that what is in cultivation fall not' (*A'in*, II, p. 46). Hence there was a concerted push to extend cultivation at the expense of forests. Akbar's courtier Khwajah Nizamuddin Ahmad notes: '... much of the land of the extensive country of Hindustan was lying uncultivated but which was capable of being cultivated in the first year, so that the benefits and advantages of such cultivation would reach both the cultivators and the imperial exchequer' (*Tabaqat*, II, p. 456). A specially appointed revenue official called a *karori* ensured that the land would be brought under cultivation in three years and would collect the dues. This is a reference to Akbar's land reforms of 1574 (the so-called *karori* experiment) where he ordered extensive land measurements in order to ascertain the possibilities for extending and improving harvests, and deducing overall agricultural development. It was mainly aimed at bringing uncultivated land and jungle at the

periphery of agricultural lands into cultivation. Based on the measured area statistics compiled by Abu'l-Fazl in the *A'in-i Akbari*, scholars such as Habib (1963, pp. 1–24) and Moosvi (1989, p. 109) estimate that the extent of cultivation in Mughal India was likely 50–52 *per cent* of what it was in 1909–10.

The complex hunting culture was deeply embedded in the Mughal socio-political system. Hence there was a constant need to create more *shikargabs* throughout the empire particularly near trade routes and restive provinces. Mughal emperors preferred to hunt in the ‘modified landscape’ of the *shikargabs* rather than the ‘natural landscape’ of the wilderness, thereby making a distinction regarding the spatial typology between the two landscapes. The *shikargab* was thus another contender for the deforested space alongside agricultural lands. Imperial hunting grounds where game was still abundant were fashioned out of these formerly densely forested areas that were tactfully cleared, and usually situated near agricultural lands and urban areas.

Court chronicles make effusive allegorical references to the *shikargab* as gardens of paradise. The courtier Qandhari observes that Akbar’s hunting was undertaken because of the beauty (and power) bestowed on the *shikargab* which was described as ‘a flourishing and green garden before which even the garden of Aram felt ashamed. Its dimensions were expansive like the heart of charitable persons ...’ (*Tarikh*, pp. 127–8), adding ‘the attractive forest ... the hand of the Almighty had, in order to preserve the honour of gardens produced green grass and flowers on the [hunting] ground’ (*ibid.*, p. 190). It is apparent that the above references are to *shikargab-i muqarrars* whose natural environment had been altered by selective jungle clearance and other ecological modifications which include the addition of enclosures, the damming of rivers and the creation of lakes for aesthetic purposes, the construction of palaces, pavilions, residences and other imperial buildings, formal gardens, and game animals driven in from neighbouring forests. These processes of physical and political transformations to the environment of the

shikargab contained all the necessary infrastructure for a proper functioning of the court, the stage for courtly rituals and ceremonials, encampment sites, imperial residences and the venue for military training and armed intervention (Parpia 2018). After extensive landscape modifications at the Hiran Minar complex in the favoured *shikargab* of Jahangirabad in 1620, Jahangir (r. 1605–1627) was said to have remarked, ‘[now] really it is a kingly hunting place’ (Jahangir, *Tuzuk*, II, p. 182).

The Lakhi jungle in the Panjab is one of many examples of cultivation made possible by canal irrigation at the expense of forests, and resulting in the creation of several imperial hunting grounds. As Sujan Rai Bhandari, a Mughal historian writing in 1695–96, notes, the periodic flooding of the Beas and Sutlej rivers created a wasteland called the Lakhi jungle (*Khulasat*, p. 63, also cited by Habib 1963, p. 16). Since the tributaries of the Indus flowed in deep channels lower than the ground surface, two distinct blocks of cultivation developed in the Panjab: one above the 200-metre mark; the other in the south-east was created by the river channels as they came together and contained cities such as Pakpattan (Wink, 1997, II, pp. 240–1). The two areas were connected at several places along the riverbed; elsewhere they were separated by the Sindsagar Doab (between the Indus and Jhelum rivers), the steppes of Rechna Doab (between the Chenab and Ravi rivers), and the Lakhi jungle (*ibid.*), the natural habitat for cheetahs, and grazing grounds for wild horses and onagers. Construction of irrigation canals eliminated the Lakhi wastelands, and substantially increased the acreage of cultivated lands; it also resulted in the creation of the favoured *shikargabs* of Pakpattan and Bhatinda.

An extraordinary feature of the Indian sub-continent is the proximity of forested areas and wild animals at the edge of cultivated land and urban contexts, the favoured location for *shikargab-i muqarrars*. Court paintings frequently explore the hunting ground-agricultural lands narrative. A painting in the Bodleian (MS. Douche Or. a.3, fo. 12r), c. 1660, depicts a Mughal

prince pursuing blackbuck in a chariot near an irrigation tank. The hunting ground harmoniously integrates with agricultural fields and pasture lands beyond, and two townscapes can be seen in the distance. In the geographical zone of the Panjab, the province of Lahore is watered by the five tributaries of the Indus, and whose 'agricultural fertility is rarely equalled' (Abu'l-Fazl, *A'in*, II, p. 316). Its main *shikargah-i muqarrars* such as Hasanabdal, Rohtas, Girjhak, Bhera, Jahangirabad, Kahnuwahan, Makhiala, Bhimbar, and Nandana were all situated in well-cultivated areas and many in proximity to urban centres. The area around Rajaur was famous for its high-quality rice and worthy of a mention by Jahangir, and it is precisely in this region that three *qamargha* hunts were organised for him in Bhimbar, Girjhak and Makhiala in quick succession in 1620 (Jahangir, *Jahangirnama*, p. 350).

European travellers to the Indian subcontinent also mention the proximity of wildlife and agricultural belts. James Forsyth (1999, pp. 40–1), who was stationed in India during the 1850s, notes that antelopes were found in considerable herds in all the corn districts of Central India, and that in most cultivated areas some inferior tracts were allotted for grazing cattle which were also used by antelopes; these herds also encroached on cultivated plots to feed on fresh wheat shoots until temporarily driven away by farmers. He also notes that nilgai were often found on 'the old sites of deserted villages and cultivation, unfortunately so common ...', adding that nilgai are 'never found very far from cultivation' (*ibid.*, p. 47). The forester P. D. Stracey stationed in Goalpara in Assam in the 1940s notes that he was often called upon to scare away elephants from paddy fields; and that the sal forest which was the elephants' habitat 'had villages all along the edge and tongues of cultivation projecting into it' (1999, pp. 83, 79).

Attitudes regarding densely forested areas were decidedly different. They were seen as inhospitable, hostile and uncultivated, and hence beyond the reaches of 'civilisation'. Large tracts of forests frequently provided shelter to insurgents and were an impediment for armies

to progress. In 1578, Akbar's armies marching under Sadiq Khan to quell the rebellions of Rajah Madhukar of Orchha had to first indulge in *jangal-bari* or clearing the jungle 'as the country was forest, and the marching of the army was difficult, they cut down the trees one day and marched the next' (Abu'l-Fazl, *Akbarnama*, III, pp. 324–5). European travellers to the Mughal court also note the arduousness of travelling through impenetrable forested terrains. De Laet, Director of the Dutch East India Company during the reign of Jahangir, notes the difficulties faced by the imperial armies led by Murtaza Khan in trying to capture Kangra fort set high in the Panjab hills to the north of Lahore in 1615: 'The only approach is through a forest 50 *kos* [kos] broad, the pathway through which is very narrow and precipitous' (1631, pp. 194–5). He also observes that engineers and workmen who worked to cut down forests ahead of the armies could only move forward at the rate of half *kos* (2 km) a day (*ibid.*). Jahangir's armies took five years of constant reinforcements to cut through 'impregnable' jungles to finally defeat Suraj Mal and take Kangra fortress in 1620 (Jahangir, *Jahangirnama*, pp. 172, 181, 193, 271, 294, 351). This was a matter of great pride for Jahangir as several Delhi Sultanate emperors and even Akbar had previously tried and failed. Incidentally, Suraj Mal was an influential and powerful landowning *zamindar* who had pledged loyalty but had reneged on his word. Upon the fall of Kangra, Jahangir visited it and the neighbouring Nurpur fort in 1622. Noticing the potential for development due to its 'beautiful vantage point', scenic setting amidst two waterfalls, healthy climate, greenery and an abundance of game birds (*ibid.*, p. 375), he ordered a calculated clearance of forests, the building of harmonious buildings and pavilions 'worthy of the spot', and the forest was thus developed for imperial hunting uses.

It is crucial to note at this juncture that environmental factors and political considerations often impeded the official agrarian policy of the expansion of cultivation at the expense of forested areas. Great swathes of cultivated land and even entire districts were often forsaken due

to natural calamities such as failed monsoons or flooding. Additionally, oppression of peasants by *jagirdars*⁴ and his agents, the very officials who were put in place to protect them, resulted in unspeakable misery and caused lands to be abandoned and depopulated. Pelsaert, a Dutch traveller in Jahangir's court notes that during Jahangir's reign, cruelty towards farmers resulted in land that 'would give a plentiful, or even an extraordinary yield' to be abandoned and consequently 'fields lie empty and unsown, and grow into wilderness' (*Remonstrantie*, p. 47). Habib (1963, p. 373) cites a section of the *Muntakhabu-l-Lubab* written by Mughal historian Khafi Khan c. 1720 that many districts that used to yield full revenue were rendered ruined and devastated due to the oppression of the authorities, and had become forests infested by wild animals such as lions and tigers. Hence cultivated lands reappropriated by forests and wildlife seem to have been commonplace. As C. Singh notes: 'The relationship between agricultural land and forested areas was not simply one of outright confrontation', adding 'the two were simultaneously engaged in a silent and fluctuating struggle of encroachment upon and retreat from each other's living space' (1995, p. 34).

Interestingly, dense forests seem to have been a hindrance to hunting. Abu'l Fazl's assessment of Gujarat indicates that the area between Pattan and Baroda, about 100 *kos* (400 km), was a fertile belt of high-quality fruit orchards such as mango, musk-melon, fig and other fruits and flowers. He also adds that cheetahs are found in great quantities in the nearby forests and that 'from the thick growth of forest sport is not satisfactory' (*A'in*, II, p. 246). This suggests that either forests were cleared before a hunt could take place, or beaters had to drive the animals from the forests into a designated *shikargah*. Jahangir's elephant trapping incident in the hilly, marshy thick jungles of Gujarat and Malwa in 1618 also indicates how the hunt failed due to the terrain. An advance party of foot soldiers and horsemen had surrounded a large herd of elephants 'as in a *qamargha*' (battue ring hunt) which were then driven by specialist elephant-drivers from the

Jarga tribe from the jungle towards Jahangir's presence, indicative of the fact that the hunt did not actually take place in the dense forest but in an altered environment. Jahangir (*Jahangirnama*, pp. 258–9) notes that the *qamargha* chain was broken due to the hilly terrain and thick growth of vegetation. *Akbbarats* or imperial newsletters written during Aurangzeb's reign such as the *Akbbarat-Darbar-i Mu'alla: Akbbarat-i Shahzada Mubammad Azam was Akbbarat-i Bahadur Shah* (A 46–9), also contain several reports of *jangal-bari* or jungle clearance in order to facilitate the hunts of Princes Azam and Bahadur. These included laying paths, clearing the forested land for decoy hunts, and driving animals towards the cleared land.

Broadly speaking, two general types of forests were found in the regions occupied by the Mughal Empire — dense tree forests in hilly terrain with plenty of fresh-water streams; and scrub forests. Both types of forests were generally interspersed with cultivation or lay on the periphery of cultivated zones and wastelands of cultivation. *Shikargahs* were found in both types of forests whose natural landscape was extensively altered for imperial use. Abu'l Fazl (*A'in*, I, p. 685) notes that elephants were found in large numbers in the provinces of Agra, parts of Berar, Allahabad, Malwa, Bihar, Bengal, and Orissa. Based on information collated from the *A'in* and other court documents, following the Mughal emperors' elephant trapping movements across the realm, the descriptions of forests pertaining to the hunt, and the understanding that elephants need dense stretches of tree forests and fresh-water streams, Habib has mapped a wide belt of forests stretching from Gujarat in the west, covering Malwa, across the Upper and Middle Gangetic Basin to Bihar, Orissa and Bengal in the east; he calls this belt the 'Great Central Indian Forest' (1982, Map 9B; also Moosvi 1989). After an extensive survey of the topography of the regions around Awadh (Oudh) in the 1830s, Butter (1839, pp. 4–7) notes that the dense forestation of the numerous higher-lying *jangals* are interspersed with cultivated zones, and that the forest was bordered by cultivation.

Another type of forest that was widely prevalent throughout the Mughal Empire relates to scrub vegetation. These were typically semi-desert, scrub jungles and grasslands, occasional tree growth, rocky tracts and low rugged hills, often bordering the wastelands of cultivated zones. These are seen as the natural habitat of cheetahs, antelope, chinkara (Indian gazelle) and blackbuck. The cheetah's swiftness means that its favoured habitat was one which allowed it to sprint with minimum obstruction by features such as trees while it brought down its prey (Divyabhanusinh 1995, p. 2). The semi-arid regions of western and central India were the most fertile cheetah hunting regions. Pakpattan, Bhatinda, Bhatnair, Nagaur, Merta, Jhunjhunu, Dholpur, and Hissar Furuza are all mentioned as *shikargab-i muqarrars* where great quantities of cheetahs were trapped.

AGRARIAN POLICIES AND ITS IMPACT ON THE THREE LANDSCAPE ELEMENTS

As mentioned earlier, the main objective of the Mughal state was to extend and improve agriculture as it constituted the main revenue source flowing into state coffers. In this regard, several agrarian policies were implemented, at the crux of which was a determined push to bring wastelands and forests under cultivation.

Surplus agricultural produce appropriated from the peasantry was shared between the emperor and the *zamindars*; the efficient working of the military and administration was contingent on a sustained flow of agrarian revenue (Hasan 1964; Zaidi 1997). However, misuse, corruption and oppression were rampant, and required constant scrutiny by the authorities, and hunting expeditions gave the emperor the opportunity to redress such situations. In return for their valuable services, *zamindars* were granted a *jagir* (land revenue grant), and a *mansab* (rank). It was also usual for the state to demand a fixed annual *pesbkash* (tribute) from the *zamindars*/*jagirdars*. The data for area under cultivation, crop-patterns and the revenue realised by the *zamindari* chiefs from their vassals or subordinate *zamindars* were

all taken into consideration by state officials in order to fix the amount of the *pesbkash* (Hasan 1964, p. 111). Increased state pressure on their economic resources not only led to the exploitation of the peasantry, but it also resulted in the clearance of forests and wastelands on the fringes of agricultural spaces for cultivation.

Consistent with Mughal policies to extend cultivation, *zamindari* rights were bestowed freely on anyone who could bring forest and wastelands under cultivation (*ibid.*, pp. 116–17). According to the two eighteenth-century discourses, the *Haqiqat-i Suba Bihar* and *Sarkar Bhojpur*, most *zamindaris* during Shah-Jahan's reign 'originated in *bankati* or populating land after clearing forests' (Hasan 1969, p. 235). The *Haqiqat* also states that wood-cutters used to accompany Shah-Jahan's troops to clear forests and bring land under the plough (*ibid.*, p. 237).

It is also notable that *madad-i ma'ash* related to uncultivated land and were awarded with the express purpose that forests and waste lands would be brought under cultivation (Hasan 1964, pp. 116–17). *Madad-i ma'ash* were land grants and subsistence allowances for benevolent purposes whereby the emperor waived his right to collect land revenue from the grantee in perpetuity (Abu'l-Fazl, *A'in*, I, pp. 278–80). The grantees could enjoy the revenues from the awarded land, and be exempt from all obligations to pay the land revenue and other royal demands such as *begar* and *shikar* which are discussed at length later. According to Abu'l-Fazl (*A'in*, I, p. 280), the general rule was to give half the area of the *madad-i ma'ash* in land already under cultivation and the other half in cultivable waste which would be capable of cultivation, usually on the fringes of cultivated areas.

The Mughal culture of the hunt often compounded the contentious relationship between agricultural lands and the *shikargab*. Agricultural workers were often forced to render services for the imperial hunting party. It was inevitable that most lands cultivated by the landowning *zamindars* used hired labour, and a large portion of this labour force was supplied by the so-called menial castes such as Chamars. Although the Mughal

emperors went to great pains to abolish the age-old custom of *begar*, or the rendering of forced labour without pay to upper caste *zamindars*, the system was often too ingrained in Indian societies to be completely eradicated (Habib 1963, pp. 141, 144). In addition to the revenue collected, revenue officials and *zamindars* also appropriated a number of exactions and perquisites from the peasants which were illegal (Tirmizi 1995, II, p. 23). One such illegal levy was *kharj-i sadir o warid*, or “‘expenses on those coming and going’” to meet the needs of the officials during their visits’ (Habib 1963, p. 288), probably a reference to expenses incurred during a visiting imperial hunting party. Other impositions include *begar* and *shikar*. Revenue officials of the concerned districts exercised the right of pressing peasants into service, invariably from the agricultural sector, for their service to carry baggage and bed-cots and supply their provisions free of charge (Elliott 1862, pp. 119–20). *Shikar* (literally ‘hunt’) here refers to the labour required from the peasants when a *qamargha* or decoy-drive hunt was set up. Peasants were required to clear jungles and lay paths for the imperial hunters and their entourage, and drive in animals from the neighbouring jungles. As discussed earlier, *jangal-bari* or jungle clearance to facilitate a hunt was a frequent occurrence. Elliott also notes that it was fairly common practice for the *jagirdar* to compound with the revenue official to pay a certain sum in lieu of having his peasants impressed out this way, and that fees thus paid were called *begar* or *shikar* (*ibid.*). Only *madad-i ma’ash* grantees were exempted from the impositions of *begar* and *shikar*. Numerous *farmans* or edicts issued during the reign of Shah-Jahan are addressed to several ranks of officials in order to exempt the grantee from these practices. One, for instance, issued in 1633 concerns a certain Abdul Wali in Khairabad who was given a *madad-i ma’ash* of 50 *bighas* of land, and which orders officials not to harass or molest him and his family for *begar* and *shikar* and taxes (Tirmizi 1995, II, pp. 51–2).

Elliott also gives another explanation for *shikar* — a ‘license fee to obtain leave to destroy

the game which, if preserved, would injure the crops’ (1862, pp. 119–20). Bernier, a French physician in the Mughal court in 1658–69 notes that although most game animals were strictly off-limits to common folk, the hunting of quails, partridges and hares was allowed and overseen by the Master of the Hunt (Bernier, *Travels*, p. 375). Hence the proximity of wildlife to agricultural lands, discussed earlier, had a damaging effect on crops. Targetting grazing animals during the hunt was seen by royal hunters as an act of public service to farmers.

Another hunting practice that was seen as detrimental to the development of agriculture arose as a result of the two hunting techniques, and severely tested the emperor’s role as a guarantor of prosperity and fertility. Both *qamargha* and decoy-drive hunts required large swathes of land to be cordoned off for several days, and involved animals being driven in from substantial distances over cultivated lands into the arena. A monumental *qamargha* organised for Akbar in Lahore in 1567 entailed over 15,000 animals driven in from neighbouring hills for over a month by 50,000 beaters into a 16-km circumference circle created especially for the hunt. Amirs from a vicinity of 160 km in every direction were mobilised to oversee the closure of several provinces (Khawaja Nizamuddin, *Tabaqat*, II, pp. 328–9; Abu’l-Fazl, *Akbarnama*, II, pp. 416–17). Animals driven in from great distances, especially on ‘paths’ called *nihilam* (see Beveridge 1900), would have invariably cut through cultivated lands and extended the space of the immediate hunting arena. A large proportion of workers employed in various hunt-related jobs such as beaters would have been drawn from the agricultural sector. The closure of about 80,000 square km of agricultural land for over a month to accommodate the 1567 *qamargha* meant not only disruptions to cultivation: it seems fair to presume that large quantities of agricultural lands and crops would have been destroyed due to the trampling of personnel and animals.

While the emperor’s hunting practices can be seen in present-day contexts as being in direct

confrontation with official attitudes towards agriculture, the *qamargha* also had a beneficial function. It was often used as a manoeuvring tool by the emperors to bring about political order in agricultural sectors. Early in his reign Akbar initiated a policy of incorporating subdued *zamindars* into the ruling hierarchy by assigning them high administrative posts and *jagirs*; they were also allowed to maintain an armed force comprised mainly of their clansfolk, with the proviso that they paid tribute and rendered military assistance to the imperial armies whenever called upon to do so (Zaidi 1997). With a considerable armed force (exceeding four million according to the *A'in*) at their beckoning and in possession of numerous small forts throughout the empire, the *zamindars* were in constant defiance of the State. The main point of conflict was the *zamindars'* share of the land revenue or in the surplus produce. Failure to pay revenue or tribute (and this was especially common among the *zamindars* whose territories were situated in forests and ravines and who took advantage of the inaccessible physical environment) was also seen as a threat to imperial law and order (C. Singh 1995, pp. 26–7). However, revolts by Afghans and other Mughal nobles who operated in wide areas and were seen as rivals to the throne were seen as more serious issues that demanded the immediate attention of the ruler and his resources; uprisings by *zamindars*, albeit powerful, were too localised to pose major threats (Khan 1997, p. 13). Rebellious *zamindars* were as a rule subjugated as a corollary to a major campaign and such marches invariably began as hunting expeditions. Once feted in court for having successfully captured Malwa province, Akbar's foster brother Adham Khan had subsequently become disloyal and subversive. In 1561, Akbar hence decided to move towards Malwa under the pretext of hunting. On the way to Malwa, Akbar and his armies encamped near Ranthambhore, a formidable fort held by the Hada chief Rai Surjan and the owner of the agricultural lands of 720 villages, who had begun to flex his muscle. Upon hearing the strength of the Mughal armies near his territory, Rai Surjan sent tributes, offered his

submission and voluntarily offered the keys to the Gagraun fort. Akbar marched on towards Sarangpur where Adham Khan was completely taken by surprise and surrendered without much opposition (Abu'l-Fazl, *Akbarnama*, II, pp. 218–19; Khan 1977, pp. 105–6; Khan 1997, p. 11).

The rulers were also well aware that there was a polarity in the relationship of their hunting culture with agrarian practices. By their own admission, emperors relate to the inevitability of crops and lands being damaged or destroyed as a result of the movement of troops during hunting expeditions. Akbar, Jahangir, Shah-Jahan and Aurangzeb mention remorse over crops being destroyed, and hence they took selective safeguards as a result. Jahangir mentions hunting in the Agra vicinity at one of his favoured *shikargabs* in early 1610; since it was the planting season he assigned a sergeant-at-arms and a troop of soldiers to protect crops grown by peasant cultivators from damage by the passage of soldiers. However, aware of the futility of even such precautionary measures, he ordered several officers to inspect the trampling 'stage by stage' and to award the peasants cash compensation for the widespread damage to crops (Jahangir, *Jahangirnama*, pp. 105–6). Shah-Jahan's historian 'Inayat Khan (*Shahjahanama*, p. 537) notes that 'in spite of every vigilance and precaution' his troops had trampled down crops on both banks of the Yamuna *en route* to Mukhlisipur in 1657, and accordingly bestowed 30,000 rupees from the royal exchequer on the peasants as compensation. It also seems likely that during imperial hunting tours one of the main grievances of farmers was a demand for compensation. During the 1646 tour of Balkh and Badakhshan, Shah-Jahan instructed his officers to make careful investigations of the taxes levied, make necessary reductions, and arrange for the disbursal of funds to compensate farmers, gardeners and melon growers for damages to crops (*ibid.*).

Merciless oppression and exploitation of the peasantry by the *jagirdars* and their agents, who were employed to protect their welfare, resulted in not only cultivated lands being abandoned, but also led to armed rebellion by the peasants.

Tawney's memorable metaphor describing China's rural population to that 'of a man standing permanently up to the neck in water, so that even a ripple is sufficient to drown him' (cited by Scott 1976, p. 1) seems apt to describe the exploited Mughal peasant, too often pushed to the brink, to revolt against the authorities. Akbar famously quashed one such revolt during a hunting expedition. Whilst hunting in the province of Agra near Sakit in 1562, Akbar heard accounts of eight villages in the area notorious for 'insolence, robbery, manslaughter, boldness and turbulence' which had been fortified by a local land-owning chief and some 4,000 peasants (Abu'l Fazl, *Akbarnama*, II, pp. 251–5). Akbar and his hunting party of 200 cavalry and 200 elephants interrupted their chase and easily put down the sedition. In 1624, Jahangir used a lion hunt in Mathura as an opportunity to flush out farmers who had used the protection of thick jungles to indulge in acts of defiance by refusing to pay taxes to the *jagirdars* and to commit highway robbery (Jahangir, *Jahangirnama*, p. 412).

IRRIGATION POLICIES — CONTRIBUTIONS OF AGRICULTURE TO HUNTING PRACTICES

Irrigation works, built primarily to enhance cultivation in arid lands, exemplify the contributions made by the agricultural sector to hunting practices. These consist of large bodies of water such as *bunds* (lakes or dams), *banz* (large tanks or reservoirs) and stepwells called *ba'oli* which used gearing devices for lifting water; and an extensive network of channels constructed by damming and diverting rivers. These water bodies also attracted abundant wildlife from the scrub lands nearby. However, imperial hunting enabled by irrigation systems was not an early modern Mughal phenomenon. Ancient Indian writings such as the *Arthashastra*, and the early twelfth-century work, the *Manasollasa*, indicate that the ideal imperial hunting ground should be situated by a lake which promoted extensive agriculture (Kautilya, *Arthashastra*, p. 64; Somesvara, *Manasollasa*, p. 42). The *Manasollasa*

also describes in detail the methods of hunting close to water bodies (*idem*, p. 43).

Closer in time, pre-Mughal Sultanate emperors (1206–1526) were prolific hydraulic water engineers and architects (Siddiqui 1986). The reign of Sultan Firuz Shah Tughluq (r. 1351–88) was marked by numerous civil engineering works. According to the historian Firishta (c. 1570–1611), Firuz Shah also built fifty dams, thirty reservoirs, ten public wells and several aqueducts and channels to promote agriculture (Firishta, *Tarikh-i-Firishta*, I, pp. 269–70). *Bunds* were also watering holes that attracted game in large numbers (*ibid.*). Consequently, a number of *shikargahs* and related buildings such as hunting palaces were built around these water bodies. Welch (1996, p. 74) notes that in Mahipalpur, south of Delhi, a *bund* and a sluice gate created a natural hunting environment for Sultan Firuz who was as fascinated by hunting as he was by hydraulic water engineering. It is important to note that wildlife being attracted to artificially created water bodies was not incidental: Sultanate waterworks were designed for multifarious purposes. Rain-fed *bunds* complemented by water diverted from rivers promoted agriculture and supplied water to the populace; the uncultivated lands near it sustained large animal populations, and provided the all-important vistas for the hunting palace where emperors could indulge in the chase (*ibid.*, p. 92). However, the observations of another Sultanate court historian 'Afif (1351–88) suggest that there may have been other conflicting aspects to the otherwise harmonious relationship between agriculture and hunting practices fostered by the construction of *bunds* and *banz*. He notes that Firuz ordered the environs of Badaun and Anwala, near Delhi, which although abundant in water and grassland, were to be retained as wasteland for hunting purposes as they were well-populated with game for the chase, adding, 'otherwise it would quickly have become peopled and cultivated under the prosperous and fostering government of Firuz' ('Afif, *Tarikh-i-Firoz Shahi*, p. 353).

Nevertheless, the Mughals inherited an extensive network of wells, dams, artificial lakes and



Plate II. Rupbas Hunting Palace, seventeenth century, Mughal Bharatpur District, Rajasthan (Photograph S. Parpia (2015).

tanks from Sultanate and older empires, as well as several hunting palaces. Mughal emperors from the time of Akbar onwards appropriated, restored, and updated older *bunds* and *hanz* and embarked on new building projects. The red sandstone hunting palace of Rupbas in the Chambal Valley, Rajasthan, was built by Shah-Jahan in the seventeenth century on the banks of an irrigation tank (Pl. II). During the three years (1613–1616) that Jahangir and the Mughal court were stationed in Ajmer province in order to conduct a campaign against Rana Amar Singh of Mewar, he hunted on fifty occasions mostly around a variety of *bunds*, both revamped older ones and those built by the Mughals (Jahangir, *Tuzuk*, I, p. 341). These include the large Bisalya Tank, and the Ana Sagar *bund* which was a favoured hunting ground where Jahangir and later Shah-Jahan built several imperial buildings. Jahangir also hunted at the Pushkar *bund* on fifteen occasions (*ibid.*, pp. 254 and 341). Ranthambhore (now a tiger preserve) in Ajmer province was another favoured *shikargah* situated around a lake which supported an abundant crop of sorghum and legumes (Abu'l-Fazl, *A'in*, II, 273). During Jahangir's march from Ajmer to Malwa in 1616–

17 he encamped and hunted at several irrigation tanks *en route*, and the *Tuzuk* provides detailed information on the crops, fruits and vegetables for market grown in region (Jahangir, *Tuzuk*, I, pp. 341–62).

The tradition of cutting irrigation canals and harnessing water from rivers was, like the practice of *bunds*, an ancient one which served to counter the inconsistencies of the monsoons (Habib 1963, p. 33). The reign of Firuz Shah is particularly remarkable for his ambitious irrigation canal projects. In 1355 Firuz dug two canals from the Yamuna and Sutlej rivers respectively. The Yamuna canal (Firuz Shah canal) ran for 90 *kos* (270 km) and brought a continuous supply of water to the newly built town of Hissar Firuza, and considerably extended cultivation (Afif, *Tarikh-i Firuz Shahi*, pp. 229–300; A. Singh 1992, pp. 49–50).

By Akbar's reign, the canal of Firuz Shah had silted up. Akbar's *sanad* (charter) issued in 1568 notes that the canal had become so choked that the waters had not flowed to Hissar Firuza in over a 100 years, and that agriculture had completely dried up (Yule 1846, p. 214). Akbar ordered the canal, renamed Shaikhu-ni, to be de-silted,

widened, deepened and extended. It ran past Karnal and Safidun and beyond to Hissar and terminated in a large *bund* at Bhadra. The forests surrounding the water bodies around Hissar also had a great concentration of game for the chase, such as antelopes and nilgais, and were particularly famous as cheetah terrain, an animal that could be trained to hunt alongside the emperor. Hissar Firuza became a favoured hunting ground and used by the Mughal emperors on many occasions. Safidun became Shah-Jahan's *shikargah-i muqarrar* where he frequently hunted ('Inayat Khan, *Shahjahanama*, pp. 407, 412). It is interesting to note that the young Akbar's choice of *shikargah* to exhibit his first public demonstration of power, having successfully forced the surrender of his powerful Chief Minister Bairam Khan, was Hissar Firuza where the Emperor trapped and captured his first cheetah (*Akbarnama*, II, pp. 186–7). It could also be seen as an act of considerable significance as the Shaikhu-ni had been restored to its former glory that no doubt brought agricultural prosperity to the region.

In 1638, Shah-Jahan ordered a new canal called the Nahr-i Bihisht which effectively extended the Shaikhu-ni from Safidun running a further 90 km to service his new city of Shahjahanabad at Delhi, and increased cultivation in many districts ('Inayat Khan, *Shahjahanama*, p. 407; A. Singh 1992, pp. 57–61). Abha Singh (1992) opines that a branch of the Shaikhu-ni flowed past Palam, which lies on the western end of the Delhi ridge. Indeed, the court historian Lahori (*Padshahnama*, II, p. 36) notes that in 1638 Shah-Jahan alighted on the bank of the *bund* on Karnal stream at Palam which was built by Asalat Khan during his governorship of Delhi, and that the emperor shot a record fifty-two black buck and deer. This indicates the location of the Palam *shikargah-i muqarrar* on the banks of the canal which was used on several occasions by Shah-Jahan as Shahjahanabad served as the new capital city from 1639–1739. He built a hunting palace, of which only part of the tower, the Hashtsal Minar, remains extant. The architectural details and significance of the tower have been discussed at length by Koch (1991) (Pl. III).



Plate III. Hashtsal Minar Hunting Tower of Shah-Jahan Palam, Delhi, completed 1634 (Photograph S. Parpia 2015).

The painting *Shah Jahan Hunting* in the Windsor *Padshahnama* was originally inserted to illustrate an earlier 1635 hunt in Palam (Pl. IV). However, Milo Beach and Ebba Koch, who have worked extensively on the manuscript, have effectively argued that it is representative of a later hunt, probably after 1640; although its location is believed by some scholars to be Rupbas, Koch opines that it could be Palam as it was Shah-Jahan's favoured *shikargah* to hunt black buck



Plate IV. 'Shah Jahan Hunting Antelope', unknown artist, India, Mughal, 1640s, from the *Padshah nama*, fo. 165r (Royal Collection Trust / © HM Queen Elizabeth II 2017).

(Beach & Koch 1997, p. 192). The subject matter is a decoy hunt by the royal entourage comprising Shah-Jahan, his son Dara-Shikoh and high-ranking nobles including the aforementioned Asalat Khan who have taken their positions at sunrise while a herd of bucks has converged on both banks of the stream. It is possible that

the stream is the branch of the Shaikhu-ni or even a symbolic reference to the Nahr-i Bihisht, the much-lauded engineering feat that brought untold agricultural prosperity to the populace. The winding rivulet continues to flow past the immediate hunting arena and winds diagonally towards groups of peasants and farmers engaged

in various agrarian activities, thereby seamlessly linking the hunting ground to cultivated spaces. The unknown artist has used the rivulet to create a visual narrative which is suggestive of the hunting activity extending and incorporating rural life. This further reinforces the justification for the hunt which, as discussed earlier, was to bring the imperial hunter into close contact with his subjects so that he could assess their conditions and dispense justice directly. As Koch notes: 'In seventeenth-century Mughal India, the juxtaposition of princely with peasant life had the specific function of legitimizing the imperial hunt' (Koch in Beach & Koch 1997, p. 193; see also Koch 1996). Hunting of grazing animals by the imperial hunter is further suggestive of his service to the peasant. As Beach (1997, p. 192) has observed, the artist uses the golden glow of the rising sun in the skies and terrain as a metaphor for the prosperity and peace of Shah-Jahan's reign. This is indicative of the fact that only a perfect balance between the emperor's hunting activities which served to manage and subdue nature, and his nurturing role as protector of agriculture, could enable this flourishing state of affairs.

However, as in several Mughal policies and practices, there was a duality of attitudes. Rivulets, streams and irrigation canals were often blocked in order to facilitate an imperial hunt. The *Nigarnama-i Munshi* mentions an order issued to the officials of the districts concerned, to block all smaller rivers from Delhi to Khizrabad in preparation for an imperial family member's (possibly Prince Mu'azzam) hunting expedition and local officials were asked to provide materials and labour for the hunt (cited by Habib 1963, pp. 289–90, fn. 44). This probably included some of the irrigation channels that flowed off the Shaikhu-ni and Nahr-i Bihisht in the Delhi-Khizrabad sector thereby resulting in social costs to the agricultural communities of the region.

CONCLUSION

The jungle at the edge of the cultivated land and the outer reaches of 'civilisation' whose

environment was already beginning to be altered by the presence of humans was a contentious zone for the Mughals just as it was in ancient India of the *Arthashastra*. The emperor was left with a polarising decision — whether to treat it as cultivable and bring it under cultivation; or let the 'natural landscape' of the hostile jungle reassert itself; or, if the site had an abundance of game and beautiful vistas, and was close to important trade routes and cities, was it to be turned into the 'modified landscape' of the favoured *shikargah*?

In his proposition to Akbar's Finance Minister Todar Mal regarding revenue collections and the protection of peasants' rights, the influential courtier Amir Fathullah Shirazi notes: 'The fluctuations of cultivation are apparent to everyone. If in a village some land falls out of cultivation, one endeavours to increase cultivation elsewhere' (Abu'l-Fazl, *Akbarnama*, III, p. 690). What Shirazi fails to mention is that it was not just natural calamities that caused farmers to abandon cultivated fields. Oppression by officials was just as responsible. Here again, the Mughal emperor was faced with a dilemma: whether to set the tax rate high so as to secure the greatest revenue for the imperial coffers, or be faced with entire villages in ruin with no sign of habitation, resulting in the jungle reasserting itself, thus increasing the emperor's hunting prospects.

Although the creation of the cultivated land and the *shikargah* emerged from an act of appropriation and modification of the forest, it seems there was no permanent ecological imprint or damage to their respective spatial domains. The Mughal system also allowed these realms to lapse back into their original landscapes. Although the importance of agricultural practices and hunting culture engendered a conflict for the same pieces of deforested land, this was countered by traditional notions of symbiosis that were said to exist between the spaces; both sectors made mutually beneficial contributions seen from cultural and political perspectives. The inferred articulation here is that there was a dynamic sustainable interdependent relationship between the three landscape elements in the Mughal tradition.

NOTES

1. Defeated local rulers, collectively called *zamindars* by the Mughals, were powerful independent and autonomous chieftains, caste and clan leaders, petty village heads or even landowners with hereditary landed interests..
2. The term 'jungle' is derived from the Sanskrit *jangala* and Classical Hindi *jangal*. *Jangal* refers to a wild forest which is uncultivated and generally uninhabited. Mughal historians use the term 'jungle' interchangeably with 'forest'. References to forests/jungles by court historians and European visitors to the Mughal court should be read as dense impenetrable tree forests in hilly terrain with fresh-water streams and/ or scrub forests.
3. An interesting parallel can be seen in the three interrelated classical elements of European agro-ecosystems, namely *ager* (ploughlands, cultivated fields), *saltus* (grazing lands) and *silva* (woodlands). Whited *et al.* (2005, p. 220) note that the *silva* was vital to the agricultural economy by virtue of its variety of resources that included wood, fodder, wild plants, grazing land for livestock, and habitat for pigs. Demographic contractions in the Middle Ages as a result of famine, the Black Death and war led to shifts in the *ager-saltus-silva* balance. The *ager* contracted and was replaced by the *saltus*, and the *saltus* in turn retreated before the *silva*. The expansion of oak forests resulted in an explosion of wild game between 1360 and 1500. In the Bas-Rhône region, for instance, the lords of the Cévennes gave unrestricted hunting rights to the peasants until the beginning of the sixteenth century as they were unable to cope with the sheer numbers of bears, deer and wolves (Ladurie 1974, p. 19).
4. It was a common policy for the Emperor to transfer his right to the land revenue accrued from the surplus produce appropriated from the peasants to certain subjects within defined territorial areas called *jagirs*. The assignees were called *jagirdars* who also held *mansabs* (ranks). The governing class of the Mughal Empire obtained a large part of its income from the *jagir* assignments (Habib 1963, p. 299).

GLOSSARY

ba'oli – step-well. Also called *wa'in*

begar – forced labour

bigha – a measure of land area equivalent to ¼ hectare

bund – large lake, dam

decoy hunt – entailed using cattle and tame antelope as decoys to lure wild antelope driven in by beaters towards the waiting imperial hunters

doab – 'land between two rivers'

hauz – irrigation tank, reservoir

jagir – an administrative grant of land assigned by the ruler entitling the holder to the income from the land granted. The *jagirdar* is a *jagir*-holder

jangal-bari – jungle/forest clearance

karor – 10 million

kos – unit of length, equivalent to approximately 4 kilometres

madad-i ma'ash – land grants and subsistence allowances for benevolent purposes by which the king waived his right to collect land revenue from the grantee in perpetuity. Also called *sayurgbal*

mansab – rank. A rank holder is a *mansabdar*

nilgai – 'blue bull', *boselaphus tragocamelus*, an Asian antelope

pairidaeza – ancient Persian paradise hunting park

pesbkash – tribute

qamargha – battue hunt with Mongol origins. It involved thousands of animals driven in by beaters from the neighbouring forests into a substantial but steadily decreasing circular enclosure formed by fences, screens or nets. Although tens of thousands of staff were involved in the hunt, it was the emperor's prerogative, and princes and noblemen were allowed into the ring only when invited.

shikar – hunt; also refers to a fee paid for game licences

shikargah – hunting ground

shikargah-i muqarrar – imperial hunting grounds that were 'established', 'frequented' and 'favoured'. Refers to a modified environment

zamindars – defeated local rulers, landowners

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CHAPTER 4

The Imperial Mughal Hunt: A Pursuit of Knowledge'

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CHAPTER 3

THE IMPERIAL MUGHAL HUNT: A PURSUIT OF KNOWLEDGE

SHAHA PARPIA

ABSTRACT

The Mughal emperors used the imperial hunt as an agency for knowledge acquisition. Investigation, experimentation, and analyses of natural phenomena encountered on the field were recorded by Mughal scholars with an emphasis on anatomy, taxonomy, and animal psychology. Detailed textual references were enhanced by naturalistic paintings that were of a technical nature and served as documents of scientific knowledge. Scientific inquiry also produced sound knowledge of animal behaviour and characteristics, thereby improving breeding programs and hunting techniques in the Mughal empire. This chapter examines the sophisticated culture of hunting as an integral part of the scientific enterprise. It reveals aspects of the nature of ‘scientific’ knowledge from a Mughal perspective, and shows its utility and functions in that cultural context. It discusses the agency of the influential *akhlāq* (ethics) texts, which postulate that acquiring scientific knowledge is a religious obligation necessary to achieve perfection, and analyses how conceptions of ethics and morality impacted the promotion, perception, and practice of natural science. This exposition contributes to the current rethinking of the relationship between science and religion by indirectly showing the lack of definitive boundaries between the two realms in the Mughal tradition. The line of discussion presented also contributes to undermining the claims made in mainstream scholarship on the history of science that South Asian scientific endeavour paled in comparison to rational Western systematic forms of knowledge. The chapter explores the complex nature of scientific activities that were motivated by the Mughal hunt and their links to art, while assessing the interrelated concepts of religion, ethics, government, and science within hunting contexts in early modern Mughal history.

INTRODUCTION

Abū'l Fazl, the emperor Akbar's historian and biographer, famously claims, ‘Short-sighted and shallow observers think that His Majesty has no other object in view but hunting; but the wise and experienced know that he pursues higher aims’, adding that Akbar ‘always makes hunting a means of increasing his knowledge’.¹ He also notes that hunting was not an activity of senseless killing as ‘ignorant’ people believe, but one where Akbar could travel incognito and without notice to ascertain the battle-readiness of troops, conduct inspections over agricultural and charitable lands, assess the efficacy and fairness of taxations laws, and deliver justice. In this way the *shikār* (hunt) can be seen as a ‘means of acquisition of knowledge’, and the complex administration of

the public realm was ‘the real kind of hunting’.² Lahōri, Shāhjahān’s biographer, notes that ‘the emperors go on hunting and sight-seeing but intrinsically they aim at ascertaining the prosperity of the kingdom and state of peace as first-hand information’.³ The dangers the emperor brought to himself during hunting and elephant fights were regarded as neither irresponsible behaviour nor neglect of kingly duties, but rather as being a test of the sincerity and ‘business capabilities’ of those who doubted him.⁴ The hunt was moreover seen as an activity to lead such ‘superficialists’ into the ‘path of true knowledge’.⁵

While Mughal primary sources frequently draw analogies between the imperial hunt and the pursuit of knowledge, references to such knowledge indicate that they were intended for the purposes of administration and good governance. However, the Mughals also seem to have used the cultural activity of the hunt to further ‘scientific’ knowledge and conduct investigations and analyses of ‘science’ as perceived by them. This chapter examines the ways in which the exercise of hunting can be seen as a medium of knowledge acquisition, and how the sophisticated culture of hunting actually promoted and enabled a kind of scientific development in the early modern Mughal tradition. Focusing on aspects of zoology, ornithology, and hunting techniques, the chapter aims to show the marriage between science, technology, and art, as seen through the lens of hunting during the reign of the Great Mughals (1525-1707). The study discusses how the Mughals — following the methodologies of observation, reasoning, comparison, and experimentation set by early Muslim scholars from the 10th century onwards — studied, tested, and often challenged established traditions in the exploration of South Asian flora and fauna they encountered during their hunts. Their scientific enterprise produced sound knowledge of animal psychology and characteristics, thereby improving breeding programs. It also helped develop hunting techniques, which were transferred to the battlefield as military tactics. Hunting also seems to have enabled technological innovations that ensured greater success in warfare and the hunt, whilst other inventions made imperial life more congenial during hunting expeditions. The visual records of these studies were systematically undertaken, and seem to have continued in the older Islamic tradition of illustrated natural history texts, such as the *Kitāb na‘t al-ḥayawān*, Arabic and Persian translations of Dioscorides’s *De Materia Medica*, and Qazwīnī’s *Ajā‘ib al-makhlūqāt*. Hence, it could be argued that explorations of South Asian flora and fauna and their pictorial depictions were completed by Mughal emperors to further the causes of good governance, the moral values required of an upstanding ruler, and the legitimacy that was engendered by a continuity of older traditions.

By studying the agency of the hunt in knowledge acquisition in general, and scientific development in particular, the chapter sheds light on what ‘science’ meant to the Mughals. It offers an understanding of what might be called ‘scientific’ knowledge from an Indo-Persian perspective, and shows its utility and function in that cultural context. The chapter places an emphasis on the natural historical sciences, and particularly zoological and ornithological studies, as these were closely connected with hunting practices.⁶

The chapter also sheds light on the significance of natural sciences in the broader framework of science in Islam. In pre- and early modern Islam, the notion of ‘science’ in general, and ‘natural science’ in particular, had wide spectrums of meaning. Science (*‘ilm*) included all branches of human knowledge, while the natural sciences (*‘ulūm ṭabī‘iyya*) included medicine, geography, optics, astronomy, and other aspects of the physical world. Philosophy and mathematics were often aligned with the natural sciences, and so were occultism and astrology, which were considered as part of

the scientific enterprise. Most importantly, however, the chapter aims to show how ethics and moral values were closely connected with scientific thinking. The text of *Akhlāq-i Naṣīrī* (The Nasirean Ethics) written by renowned philosopher-astronomer Naṣīr al-Dīn al-Ṭūsī (d. 1274), for example, shows how conceptions of morality impacted the ways in which science was conceptualised and practised in Mughal culture.⁷ This text is discussed in some detail later in the chapter.

The chapter contributes to the current rethinking of the relationship between science and religion, by indirectly showing the lack of definitive boundaries between the two realms in the Mughal tradition. A similar situation is also found in the early modern Western intellectual tradition. As historian of science and religion Peter Harrison notes, ‘So familiar are the concepts “science” and “religion”, and so central to Western culture have been the activities and achievements that are usually labelled “religious” and “scientific”, that it is natural to assume that they were enduring features of the cultural landscape of the West’.⁸ This study of the hunt as an integral part of the scientific enterprise confirms recent findings that, until relatively recently, the boundaries of the two domains of science and religion were understood very differently, and that human meaning and moral values were rarely separated from the understandings of the nature of the universe and other activities we now consider as being firmly located within the realm of science.⁹

Furthermore, the lines of discussion presented in this study contribute to undermining the claims made in mainstream scholarship in general that South Asian science and scholarship was secondary to rational Western systematic forms of knowledge. The chapter reinforces Pollock’s cautions against ‘definitional consistency’, as the English word ‘science’ is a ‘pliable signifier’ that points to no natural kind, and it is ‘no straightforward matter to map onto it the congeries of terms and texts and medieval practices’ of mediaeval India.¹⁰ It is with these perspectives in mind that the current chapter explores Mughal scientific activity that was enabled and expanded by the hunt.

SCIENTIFIC INQUIRY

In Mughal India, Akbar’s doctrine of *ṣulh-i kul* or ‘absolute peace’, as propounded by Abū’l Fazl, which sought to bring about a unity of religions and an acceptance of diversity, embraced a ‘new outlook of sympathy and tolerance’ towards philosophy, the sciences, and reason.¹¹ This is reflected in Akbar’s reforms of prevailing *madrasa* education and his decision to include rational sciences in the syllabi, which ‘cast a new light on schools, and cast a bright lustre over *madrasas*’.¹² Abū’l Fazl notes that students were taught in stages, and that the subjects included ethics, arithmetic, accountancy, agriculture/horticulture, surveying, geometry, astronomy, geomancy, architecture, government, medicine, logic — that is, the *ṭabī‘ī* (physical) and *riyāzī* (quantitative) sciences, in addition to the *ilāhī* (divine) sciences. They were also taught Sanskrit, Vedantic philosophy, and the grammar of Patanjali.¹³ These educational reforms, which indicate a regard for the classical sciences and the ancient Indian intellectual heritage, were planned and carried out by the Persian scholar Mīr Fath’ullāh Shirāzi, a polymath scientist who had ‘no equal in Persia or India, or rather in the habitable world in all the sciences’.¹⁴ Other writers of the age such as Chandrabhān Brahman and Bālkrishan also suggest that the introduction of rational subjects in the syllabi encouraged large numbers of Hindus to join the *madrasas*.¹⁵ This implies that the sciences and rational education were systematic and institutionalised, and benefited from imperial patronage. However, the writings of François Bernier, a French physician in the Mughal court, suggest an absence of ‘academies and colleges properly endowed’.¹⁶ Perhaps Bernier, who was a student of

the philosopher Gassendi and was familiar with the formal institutions of learning in Europe, was misjudging the intellectual extensiveness of *madrasas* and the informal nature of teaching circles held in mosques and bazaars, presided over by the *ahl-i 'ilm* (people of learning), who included physicians and astronomers.¹⁷

Nevertheless, even Abū'l Fazl acknowledges the role of inflexible tradition and ideology in hampering the growth of science and reason: 'From time immemorial, the exercise of inquiry has been restricted, and questioning and investigation have been regarded as precursors of infidelity', he wrote, adding that 'a few among the intelligent of their generation admit the imbecility of this procedure in others'.¹⁸ Abū'l Fazl's reflections indicate that while scientific knowledge may not have been widespread, a courtly culture of learning existed, along with imperial patronage of scholars. Zoological and botanical writings compiled in India are diverse in origin and content. According to Rahman et al., over 10,000 scientific works were produced in Sanskrit, Arabic, and Persian between the 8th and 19th centuries, with over 200 volumes in zoology alone.¹⁹ And as Pollock notes, 'with the coming of Pax Mughalana from the second half of the 16th century, a new and dynamic era of intellectual inquiry was inaugurated in many parts of the [Indian] subcontinent. Whole libraries of the manuscripts produced over the following three centuries exist today — and lie unedited, even unread'.²⁰ The flourishing intellectual tradition hence suggests that the emperors' scientific inquiry enabled by the hunt was not an isolated undertaking; there was a prevailing intercultural scientific milieu in the Mughal court.

The kinds of Mughal scientific activities that were enabled by the hunt need to be gleaned from a variety of sources, which are often unrelated. Official court writings such as memoirs, biographies, and gazetteers, for instance, contain detailed information on natural history in addition to ubiquitous historical and administrative matters. While this is not the pragmatic, analytical method of modern Western science, it follows the trend of Indo-Persian historiographies of the time, which used interconnected literary genres to encompass all aspects of India's culture: the richness of its lands, inhabitants, flora and fauna, as well as a commemoration of the society's scholarship, architectural achievements, and economic glories.²¹ Hence, it could be argued that one of the reasons Mughal emperors included detailed natural historical information of species encountered during hunts was to propagate a view of India as a land of natural (zoological and botanical) wonders, which was an all-important consideration for the success of their imperial vision. Even Bābur, who often found the Indian lifestyle, topography, and lack of formal gardens disagreeable to his Central Asian sensibilities, found the Indian flora and fauna fascinating, and his memoirs, written in a text called the *Bāburnāma*, contain graphic descriptions of several species.²² These natural historical studies were later extensively illustrated by artists in Akbar's atelier and comprise over 120 illustrated folios.²³

Bābur was particularly taken with the mammals peculiar to India, such as the elephant, rhinoceros, and nilgai, and native species of birds, such as the peacock. His penetrating descriptions of these are reflective of his knowledge and 'born of careful and intelligent observation'.²⁴ They were often recorded from a hunting perspective. His studies of the rhinoceros, for instance, include detailed information about the length of its horn and its power as demonstrated in the number of men and horses it had gored during hunts. The thickness of the hide of the rhinoceros was measured in accordance with how far an arrow shot from a stiff bow drawn with full strength might penetrate it, namely four inches. Bābur further notes a similarity in the size of the animal's

stomach and pastern to that of a horse.²⁵ He also gives information about the natural habitat of the rhinoceros, and its behavioural patterns, noting that it cannot be made submissive and obedient like the elephant. It is important to note here that hunting an animal like the rhinoceros armed with just bows and arrows required an intimate knowledge of animal anatomy in order to ascertain its most vulnerable spot, given its thick and relatively impenetrable hide. By Jahāngīr's reign (r. 1605-27), this knowledge was clearly commonplace, as Jahāngīr notes that while hunting in Nuh Ban, Aligarh, he killed a rhinoceros with a single shot aimed near the animal's earlobe.²⁶

One of the consequences of the *shikār* was that it enabled a respect for the flora and fauna of the Indian subcontinent engendered by a keen and often sensitive observation of the diversity of wildlife encountered on the field. In Mughal India, zoological studies included animal anatomy, taxonomy, and psychology. They also included various diseases, diagnostics, treatments, and remedies. These were recorded employing all the empirical tools of research available, including observation, dissection, and experimentation, as well as comparison with other species and the challenging of longstanding traditions. Jahāngīr was an avid hunter and equally keen naturalist. His memoirs, the *Jahāngīrnāma* or *Tūzūk-i Jahāngīrī*, contain evocative but accurate and succinct descriptions of flora and fauna encountered during hunts. He is exacting in his methodology, as he notes that '[o]nly those that are really special can be recorded'.²⁷ Specimens were weighed and measured, and the details recorded included local names, geographical distribution, anatomical peculiarities, and food habits, as well as the specimens' habitats, climatic conditions, and behaviours. Foreign species were also often compared to indigenous counterparts. For instance, en route to Malwa province in 1617 and encamped in the halting place of Qasim-khera (Qasimgarh) with the imperial entourage, Jahāngīr records that he hunted an unfamiliar 'white' animal. It has been subsequently identified as the four-horned antelope, *Tetracerus quadricornis*, and the naturalist Salim Ali opines that its colouring was probably pale brown.²⁸ Jahāngīr notes:

[I]t resembled the *kūtāh pāya* (Hog Deer); it had four horns, two of which were opposite the extremities of its eyes and two finger-breadths in height, and the other two horns were towards the nape of the neck. These were four finger-breadths in height. The people of India call this animal *dūdihāriya*. The male has four horns and the female none. It was said that this kind of antelope has no gall-bladder, but when they looked at its intestines the gall-bladder was apparent, and it became clear that this report has no foundation.²⁹

In another anecdote, while on a tour to Kabul in 1607, Jahāngīr and his court were encamped in the Safid Sang meadow, near Du'aba, where a great *qamarghā* ring hunt was organised for him. During the hunt, 116 deer, 24 *rang* (ibex), 50 red antelopes, and 16 markhor (wild goats) were taken. Jahāngīr notes that it was his first experience seeing a *rang*, which he describes as a fine-looking animal, even surpassing the Hindustan black antelope in appearance. He ordered that a mountain ram and a *rang* be weighed for comparison. The ram came to 1 maund and 33 seers, and the *rang* was 2 maunds and 10 seers. Jahāngīr also notes that in spite of its large size, the *rang* was a nimble animal, as 12 swift dogs were worn out in pursuit and seized it with 'a hundred thousand difficulties'.³⁰

Regarding taxonomy, Jahāngīr reverts to the tradition of older Arabic texts, grouping them according to 'outward criterions [sic] and regardless of casual connections'.³¹ He uses the word *ālam* (world of) to indicate a specific family, grouping animals with comparable affinities, such as the coat or size and shape of bill.³² For instance, Jahāngīr notes that the langur belongs to the world of the



Figure 3.1 Rhinoceros, *Vaki'at-i Baburi*. Or. 3714 vol. 4 fol. 379, British Library, London. © British Library Board (Or. 3714).

monkey (*'ālam maimūn*), and the dipper to the world of the bulbul.³³ The *Jahāngīrnāma* also contains explicit details regarding strange zoological phenomena and experiments that were carried out on the field during hunts in order to increase Jahāngīr's knowledge, and to verify established animal myths. Jahāngīr is known to have taken a rationalistic approach to experimentation, testing, and observation in order to reach a verified truth.³⁴ Some of his many experiments include dissecting a king cobra to observe its cannibalistic characteristics; dissecting the livers and gall bladders of wolves and lions to establish links to their proverbial courage; studying stress levels in antelopes hunted by cheetahs; and challenging the accepted belief that aggression in male mountain goats was caused by parasites in their horn.³⁵ However, as Koch observes, Jahāngīr 'fails to feed the results of his empirical research into a theoretical framework and his observations do not lead to a systematic body of knowledge'.³⁶

Detailed textual descriptions of flora and fauna encountered during the Mughal hunts were developed by court artists into lavish paintings that were precise, well defined, and objective nature studies. By the end of Akbar's reign, a distinctive style had developed, focusing on artistic realism and the naturalistic treatment of independent studies of animals and birds.³⁷ Jahāngīr, who inherited a mature atelier, continued to champion artists such as the acclaimed *Ustād* Mansūr, who was seen as the master of the animal painting genre, given to portraying wildlife in an anatomically accurate manner with a degree of unparalleled naturalism. Verma claims that the imperial artists' long tradition of illustrating manuscripts of fables such as *Anwār-i suhaili*, *Iyar-i dānish*, and *Ajā'ib-i makhluqāt* properly acquainted them with animal characteristics and psychology.³⁸ The trend to document textual descriptions of animal species with corresponding visual studies was accordingly set in motion in the early stages of the Mughal painting tradition. Shāhjahān's albums continued this trend of realism, extending it to broad margin paintings of detailed animal, bird, and floral studies. It seems that Jahāngīr's rationale for the objective portrayal of wildlife, which enhanced the scientific nature of his textual descriptions, was his desire for historical documentation of the rarities of nature for posterity. He writes: 'I both wrote of them and ordered the artists to draw their likeness in the *Jahāngīrnāma* so that the astonishment one has at hearing of them would increase by seeing them'.³⁹ Koch notes that Jahāngīr also seems to imply the advantages of a dual method, written and visual, in representing natural phenomena.⁴⁰

Paintings of particular hunts and independent studies that correspond to dated textual sources indicate that artists travelled to *shikārgāhs* and on extended tours with the emperor, as such paintings were meant to be visual records of the events. For instance, when encountering a new species of bird, which he identifies as a *sāj* or dipper, in the Sukh Nag stream in the Kashmiri hills during the 1620 trip, Jahāngīr observes its colouration, and compares it with the more common bulbul due to its appearance and its tendency to dive and stay underwater for a while before emerging elsewhere. He also examines its feet, to ascertain if they were like the feet of waterfowl or land birds, and records that they were not webbed like a duck.⁴¹ Mansūr has depicted the *sāj* in a hilly Kashmiri landscape beside a flowing stream. Verma notes that 'the juxtapositioning of another bird, smaller in size and apparently viewed from a distance, and the receding contours of the hills painted in blurred colour, suggest perspective, besides giving relief to the central figure'.⁴² While Mansūr may have used the smaller *sāj* and other artistic tools to convey perspective, by depicting another angle of the bird to show the colouration of its belly feathers his painting also fulfils the criteria of natural historical observations. According to Verma, Mughal painters portrayed the animal/bird as an 'individual'



Figure 3.2 Dipper/*Saj*, album leaf painted by Mansūr. Acc. 55.121.10.16, The Metropolitan Museum of Art, New York. (Licensed under CC0 1.0.)

with minimum movement, and an emphasis on realism and physiognomy, which best suited animal studies.⁴³ The finesse and accuracy with which the artists have portrayed the bodily contours, microscopic anatomical details, colouration and expression of the animals, as well as the treatment of space, liveliness of brushstrokes, and other techniques, have often been discussed at length for their artistic worth. Mughal animal illustrations have also been examined by naturalists, historians of science, and scientists who acknowledge their merit as valuable scientific studies.⁴⁴ Art thus remains a crucial medium in recording and disseminating the knowledge of nature in Mughal contexts.

SCIENCE AND MORALITY

As noted earlier, science, ethics, moral values, and religion were interrelated concepts in Mughal cultural contexts. Hence, ethical literature, such as Naṣīr al-Dīn al-Ṭūsī's *Akhlāq-i Naṣīrī* wielded considerable influence in religious, political, social, and cultural spheres.⁴⁵ To support his views al-Ṭūsī cites the teachings of classical Greek philosophers and pre-Islamic Persian sages; he also makes frequent references to the Quran and Hadiths, and anchors the *akhlāq* (Arabic for 'ethics') framework in the *sharī'a* (Arabic for 'law'), thus legitimising his work and making it politically compliant for imperial use. Alam opines that al-Ṭūsī uses the term *sharī'a* not in the 'narrow legalistic sense', but as 'a notion of laws as norms' by which the king was obligated to ensure the welfare of *all* his subjects.⁴⁶ Jahāngīr, like Abū'l Fazl, frequently invokes God's hand in the wonders of creation of unusual animals. Of the zebra, Jahāngīr notes: '[T]he painter of destiny had produced a tour de force on the canvas of time with his wonder-working brush'.⁴⁷ Religious perspectives, wherein animal studies enabled an appreciation of the wisdom of God, were often the rationale of Islamic scientific inquiry.⁴⁸

Akhlāq ethical texts advocate the virtue of having the courage to 'retain firmness in situations of alarm and danger' and to act by the dictates of 'right reason' as one of the essential qualities of an ideal king.⁴⁹ Hunting was seen as a good and proper sport for a king if undertaken for the right reasons and in moderation.⁵⁰ Hence hunting became a pivotal agency through which the emperor's authority and public persona were projected.

Akbar's *Dastūru'l-'amal*, which was distributed to court officials, further counsels imperial officers to be 'not too fond of hunting; but to go out hunting occasionally, with the object of military exercise and for relaxation, which is an unavoidable adjunct of human existence'.⁵¹ The moral dichotomy inherent in the act of killing animals during hunting was confronted by reference to *akhlāq* texts, which advocated the image of the emperor as a brave hunter who had a moral obligation to subdue wild nature in order to protect his people: 'Men, Animal and Conscience completed the circle of Akbar's authority'.⁵² Sumptuous paintings by court artists who travelled with the court on hunts served to magnify this image.⁵³ Hence it could be argued that while hunting images served to endorse imperial authority over the zoological and botanical domain, independent images of natural historical studies affirmed the observance of equity required by the ruler towards God's creatures.⁵⁴

Observing the mutual respect between man and beast can be seen as another reason for scientific inquiry. The *Akhlāq-i Naṣīrī* notes that elements, plants, and animals render aid to the human species whether as matter, as instrument, or by way of service, and that the human species needs the aid of the other species and the co-operation of its own kind to ensure survival.⁵⁵ This translated into the Mughal politico- and socio-cultural context in several different ways.

The superior breeding and selection of animals used during the hunt and on hunting expeditions, such as elephants, horses, and camels, not only ensured better hunting practices; they were also an integral element of the success of the Mughal military campaigns. Extensive anatomical knowledge was thus crucial for producing the optimal breed and ensuring the animals' welfare and comfort. The *Āīn-i Akbarī* devotes several reports to details such as the animals' physical characteristics, behavioural patterns, and breeding details; the maintenance of imperial stables; the classification of species; the ranks of the animals and the resulting food allocation, medical needs, riding methods, and harnesses allowed. It also includes a detailed compendium of officers and servants attached to these animals.⁵⁶ Abū'l Fazl attributes Akbar's patronage to the successful production of local horse breeds, such as *sanūjī*, *pachwariya gūt*, and *tānghan*, which were supposedly as fine as those from Iraq and Arabia, or even ranked higher.⁵⁷

The universal nature of the *akhlāq* ethical models, with their emphasis on good values and high morals which could transcend religious faiths, led to the cultivation of a multicultural and socially inclusive imperial image. This extended to a flourishing Sanskrit literary culture alongside the use of the Persian language at court. Imperial patronage resulted in the development of detailed exegeses of Sanskrit texts in order to forge authority and benefit from different forms of knowledge.⁵⁸ Both pre-Mughal Sultanate and Mughal scientific writings hence benefited greatly from the existing rich intellectual repository of Sanskrit writings. Intellectual intercommunication between Sanskrit literati and Persian scholars resulted in several Sanskrit scientific treatises being translated and absorbed into Persian writings. The *Śālihotra somhita*, written probably around the 7th or 8th century, and the *Aśvavaidyaka* of Jayadatta, written between the 8th to 12th centuries, are possibly two of the most important Sanskrit zoological texts, which inspired several works throughout the ages in Sanskrit and Indian regional languages. Additionally, at least three Persian works, *Tarjuma-i Śālihotra* of Abdu'llāh Ṣafi (15th century), the *Farasnāma* of 'Abdu'llāh Khān Fīrūz Jung (17th century), and the *Farasnāma* of Zainu'l-'alamīn Abū'l-Hasan (16th century) are Persian adaptations of the *Śālihotra somhita*, which includes, among other concerns, classification, diseases, diagnostics, treatments, and surgical procedures for horses, as well as equine toxicology.⁵⁹ This is contrary to the observations of some scholars who note that the Muslim invaders of India stifled Hindu-Sanskrit learning, and that they were indifferent to any culture but that of Islam, and drew their knowledge and inspiration from Arabic and Persian sources alone.⁶⁰

Falcons and birds of prey were cherished members of the imperial hunting establishment alongside elephants and cheetahs. These animals rendered invaluable service to the Mughal court and therefore needed to be respected as suggested by the *akhlāq* texts. Outcomes at the hunt depended on the taming and training programs, which required sound knowledge of anatomy and psychology. Treatises on birds of prey and falconry were a popular genre in the Mughal libraries. The *Bāznāma* of Bahādur Khān (17th century), the *Bāznamā* of Muḥibb 'Alī Khān (17th century), *Mīr'ātu's-ṣa'īd* of Allāh Yār Jāmi (early 18th century), the *Shahbāznāma-i Fīrūz Shāh* of Firuz Shah (16th century), and *Dastūru's-ṣa'īd* of Riḍā Yūsuf include information on the capture, training, diet, diseases, and treatment of hunting birds. Interestingly, some of the authors of the treatises on falcons, such as Allāh Yār Jāmi and Riḍā Yūsuf, were *mīr-i shikārs* (masters of the hunt), which adds a further link between hunting and the pursuit of scientific knowledge.

The Mughal emperors' visceral connection with the natural world also enabled knowledge of the diseases afflicting animals. Jahāngīr, for instance, recorded the symptoms and effects of rabies

in great detail when his personal elephant, Gajpati, was stricken by the disease.⁶¹ The nature of animal illnesses and injuries was further studied at veterinary hospitals, called *pinjarapoles*. Pietro della Valle, an Italian traveller to the Mughal Empire in 1623-24, visited many specialised veterinary hospitals in Cambay, Gujarat.⁶² Thevenot, a French traveller in Aurangzeb's court in 1666, also notes similar veterinary hospitals in Ahmedabad, where oxen, camels, horses, and other wounded beasts were cared for, and another dedicated to apes in Delhi.⁶³ Studies of poisons and venoms from snakes also formed part of the body of knowledge facilitated by the hunt. Manucci, an Italian traveller in India during the later reign of Shāhjahān and then Aurangzeb, notes that snakes were used as a punishment for and deterrent against official corruption. Under Shāhjahān's orders, an official supposedly kept several baskets of poisonous snakes at court. Snakes would be made to bite any official found guilty of miscarriage of justice, and Manucci was witness to the execution by cobra-bite of a magistrate found guilty of taking bribes.⁶⁴

HUNTING TECHNIQUES

A sound knowledge of hunting techniques ensured not only that large quantities of game were brought down, but also that many of the methods used were transferred to the battlefield as military tactics. Bābur observes that the one of the merits of the Uzbek armies was their use of a manoeuvre called the 'flank assault', which was a series of encircling, turning, and spinning movements called a *tūlghuma*, whereby the turning parties, officers, and ordinary soldiers, riding loose-rein, would wheel around to surround and discharge arrows towards the centre.⁶⁵ Hunting, especially in a *qamarghā*, provided many opportunities to perfect the movement.⁶⁶

Bābur notes a battle formation used by the Uzbeks whereby officers were assigned particular positions, namely right wing, left wing, centre, and flank, with high-ranking officers taking the privileged positions towards the edge. This formation was also used during a *qamarghā*. If a dispute arose over these positions, it was usually settled by the agreement that one clan takes the honourable position in the *qamarghā* and the other in the battle array.⁶⁷ Bābur used the same Chinghisid battle formations and the *tūlghuma* technique to great effect during the decisive Battle of Panipat in 1525-26 against Ibrahim Lodi, throwing the greatly outnumbered Lodi army, comprising 100,000 soldiers and 1000 war elephants, into complete disarray and confusion.⁶⁸

The *qamarghā* technique required game to be surrounded and encircled before being hunted. Mughal skirmishes were based on the same campaign plan, to surround the enemy and then close in towards the core. For instance, during the Battle of Khanua against Rāna Sangha in 1527, Bābur had the troops emerge from the right and left centre, leaving a space in the middle for the musketeers. The victorious Mughal army 'forced and drove the enfeebled left and right of the enemy into one mass with their centre'.⁶⁹ The 1567 *qamarghā* organised for Akbar in Lahore required over 15,000 animals to be driven in from the neighbouring hills for over a month by about 5000 beaters into a circle 16 kilometres in circumference. Akbar hunted in the steadily decreasing ring for five days.⁷⁰ The monumental double-page composition of this *qamarghā* in the Victoria and Albert Museum *Akbarnāma* is reflective of what has been billed the greatest hunt ever held.⁷¹ O'Hanlon notes that hunting paintings exhibit a 'strong sense of place in a north Indian landscape, reflecting Akbar's role not only as divine king, moral exemplar, and dispenser of justice, but as a ruler profoundly attuned to the subtle ecological balance of the land and its people'.⁷² While the painting serves to illustrate the necessary qualities of a warrior king, equally



Figure 3.3 Akbar hunts with cheetahs in a *qamarghā* ring in Lahore in 1567, painted by Miskīna with Mansūr and Sarwān, *Akbarnāma*. Reproduced from the Victoria and Albert Museum, London. Permission granted © Victoria and Albert Museum, London.

adept on the battlefield, court and *shikārgāh*, it is also a study of the natural history of the area around the Salt Range of the Lahore province, thus demonstrating a valid link between the hunt and zoological sciences. Divyabhanusinh has identified markhors (wild goats), Punjab urial (wild sheep), blackbucks, jackals, antelopes, civets, foxes, and hyenas. The three cheetahs on the loose and two more about to be released by their keepers have attacked nilgais (blue bulls), hares, and chital (spotted deer). He also notes that the accurate depiction of injured and dead animals implies that Miskīna and his colourists, Mansūr and Sarwān, would have witnessed the hunt.⁷³

Hunting with cheetahs was another favoured hunting technique for the Mughal emperors, and cheetahs were held in high esteem at court. The anatomy, behavioural patterns, and skills naturally exhibited by the cheetah as it gave chase were studied at length, leading to regulations regarding training methods, food allocation, and proper transportation during tours. The cheetah's ability to go against the wind, along with its instinct to lie concealed before the ambush, as well as to kick up dust with its feet to confuse its prey, were all observed and used in training programs.⁷⁴ And as the following incident demonstrates, scientific data had to be constantly updated. Abū'l Fazl recalls a 'joyful occurrence' while Akbar was hunting with his cheetahs in Sanganir in 1527. While Akbar was pursuing a herd of blackbuck with a tame, favoured cheetah named Chitr Najan, which gave



Figure 3.4 Akbar hunting black buck with trained cheetahs in 1527, painted by La'l and Kēsav Khord, Akbarnama. Reproduced from the Victoria and Albert Museum, London. Permission granted © Victoria and Albert Museum, London.

chase, a large buck leapt into the air ‘to a height of a spear and a half’ to cross a ravine which was 25 yards (22.8 metres) wide. Chitr Najan cleared the ravine and hunted it down. Cheetahs are renowned for their speed, not their leaping abilities. This unusual characteristic of the cheetah, previously unknown, was hence recorded in the inimitable Mughal style — Chitr Najan was honoured as chief cheetah with a roll of drums.⁷⁵ The two artists from the imperial atelier, La’l and Kēsav, were at hand to visualise the incident, which also shows how the blindfolded cheetahs were transported in bullock carts to the *shikārgāh*. The hunting image hence reinforces the ever-present link between art and scientific knowledge.

TECHNOLOGICAL INNOVATIONS

Technological and mechanical arts were greatly appreciated at court. Mughal primary sources, although fragmentary with their descriptions, refer to a number of innovations unveiled at court. This study highlights only those pertaining to the hunt and used during hunting expeditions. Abū’l Fazl credits Akbar as being the author of several inventions, and the writings of Jesuit fathers visiting the Mughal court affirm Akbar’s interest and hands-on approach to industrial crafts.⁷⁶ The Mughal court went on what it referred to as hunting expeditions over extended periods of time in order to consolidate its hold over distant provinces and deal with administrative matters, and these inventions would have made life at encampment sites more pleasurable for the royals. They include portable pavilion-palaces, which were capable of accommodating over 10,000 people, and which took over 1000 workmen to assemble. They were fitted with Akbar’s innovative iron rings with ‘male’ and ‘female’ fasteners, posts, and wooden boards to increase structural stability.⁷⁷ Refrigeration techniques using saltpetre as a cooling agent, improvements to geared waterlifts, and luxury portable baths with several *ḥammāms* drawn by elephant or cattle were other considerable innovations.⁷⁸ Another mechanical device attributed to Mīr Fath’ullāh Shirāzi, the Persian scientist, who, as noted earlier, was responsible for the overhaul of *madrasa* education, is a cart-mill for grinding grain into flour.⁷⁹

Abū’l Fazl notes that matchlocks were manufactured in Akbar’s arsenal, and he credits Akbar himself with this invention. Abū’l Fazl’s descriptions note that the matchlock did not require a match and needed only a slight movement of the trigger to fire the pellet.⁸⁰ Habib opines that the gun could have been a wheel-lock, and since the latter was only invented in Italy in the 1520s, and not yet widely used due to its delicate mechanism, it was a significant achievement of Mughal industrial technology.⁸¹ The *(y)barghū*, a contraption for boring and smoothening gun barrels, is generally attributed to Fath’ullāh Shirāzi. Abu’l Fazl notes that this device, a wheel turned by an ox, smoothened the barrels of 16 handguns in a small amount of time.⁸² Using Abū’l Fazl’s drawing, Habib and Alvi and Rahman have reconstructed the mechanics underlying its workings, which use a pin-drum whose pins meshed with the pegs of eight vertical gear-wheels with projecting axles that could enter the gun barrel to smoothen them.⁸³ Akbar’s other achievement was a procedure to strengthen the gun barrel.⁸⁴ While Abū’l Fazl’s claims of Akbar’s authorship for many of these devices may be debatable, there is no doubt that the prevailing milieu at the Mughal court, largely driven by Akbar’s enquiring mind and patronage, spurred many technological advances. Mechanical innovations doubtless improved lifestyles during tours and boosted the prestige of the ruling family as patrons of technology. Others were directly responsible for greater success during wartime and during the hunt. Importantly, the inventions adhered to aspects of *akhlāq* literature



Figure 3.5 Shāhjahān hunting antelopes, perhaps Rupbas, after 1640, unknown artist. Reproduced from Folio 165A, Royal Collections Trust, Windsor Castle, Windsor. Permission granted Royal Collection Trust/© Her Majesty Queen Elizabeth II 2016.

whereby the emperor was committed to creating the best possible conditions of welfare for his subjects.⁸⁵

Hunting images provide a further link between art and technology. O’Hanlon notes, ‘It was also in hunting ... that the emperor appeared in closest communion with the north Indian landscape’.⁸⁶ This is certainly true of the painting of Shāhjahān and his son Dāra-Shikōh hunting antelopes around 1640, one of the most evocative images in the Royal Collections’ *Pādshāhnāma*.⁸⁷ The hunting party, dressed in camouflage green, wait to take aim at the animals driven in by huntsmen using tame antelopes as decoys. The image is a metaphor for the prosperity and power of Shāhjahān’s reign, and the artist has used it to draw analogies between the hunt and the emperor’s legitimising role as promoting social welfare. However, it is also a study in firearm technology. Shāhjahān is about to pull the trigger of his royal matchlock named *Khassban*, which will fire the charge.⁸⁸ Although Shāhjahān’s elbow is supported by his raised knee and the gun is steadied by the string attached to a ring on the barrel, the gun is mainly supported on the shoulder of the huntsman in front. This implies that matchlocks were still slow and unreliable at the time, and hence better suited for the less strenuous nature of the decoy hunt rather than the warlike *qamarghā*.⁸⁹

CONCLUSION

The reluctance of the *madrasa* — the principal institution of higher learning in Arab-Islamic civilisation — to include systematic instructions on rational or natural sciences in its curriculum has often been cited as one of the primary causes of the failure of Islamic science to grow and develop beyond the 14th century.⁹⁰ However, judging from the level of scientific and intellectual activity in Mughal India, the situation seems to have been extraordinary. In spite of ample evidence to the contrary, Mughal scientific inquiry has come under frequent criticism by Orientalists and their claims that natural history and experimental philosophy were not cultivated in India.⁹¹ Western travellers to the Mughal court such as Bernier attribute the ‘profound and universal ignorance’ of the Indian society to the lack of formal educational institutions.⁹² Ironically, Dānishmand Khān — Bernier’s patron, the Mughal courtier and scholar, who requested the translations into Persian of the works of several European scholars (such as Descartes, Gassendi, Harvey, and Pecquet) — was also responsible for Bernier being immersed in the dynamic intellectual community and Sanskrit literati in India. Dānishmand also introduced him to several Persian translations of Sanskrit texts, which he subsequently carried back to Europe.⁹³ Perhaps Bernier’s lament regarding the dearth of systematic and institutionalised knowledge in Mughal India arose as a result of his training in science marked by ‘the pragmatic and critical method of modern Western science which has guided Western thinking into the right course’.⁹⁴ Indeed, Abū’l Fazl’s ruminations regarding the predominance of ideological tradition summarise the state of affairs in the Mughal court — ‘the blowing of the chill blast of inflexible custom (*taqlid*) and the low flicker from the lamp of wisdom’⁹⁵ — and the fact that, despite the introduction of scientific and rational syllabi in schools, the ‘socio-economic and ideological stimulants that this was producing were not apparently provocative enough to bring about a paradigm change in the structure of Indian science’.⁹⁶ Education remained firmly in the domain of the privileged.⁹⁷ And the languages of science — Sanskrit in ancient India, Persian in Mughal India — were not the languages of the masses, and were seen as aristocratic and elitist.⁹⁸ Scientific knowledge acquisition was hence a courtly undertaking. However, this study has shown the extensive level and range of scientific and technological activities furthered by the hunt, which

was cultivated and fostered by imperial patronage. Abū'l Fazl and other court historians frequently note the complex knowledge-based noble reasons that vindicated the imperial *shikār*. These include dispensation of justice, articulation of good governance, and implementation of administrative affairs. The line of discussions presented in this chapter seeks to recalibrate the received wisdom of these 'higher aims' with the implication that the acquisition of scientific knowledge was likely perceived as an added dimension to the superior motives of the hunt.

NOTES

- 1 Abū'l Fazl, 2010, *Ā'in-i Akbarī*, vol. I, trans. H Blochmann, ed. DC Phillott (Calcutta: The Asiatic Society, First published 1866-94, edited 1927), 292.
- 2 Abū'l Fazl, 2010, vol. I, 292. Abū'l Fazl, 2000, *Akbarnāma*, vol. II, trans. H Beveridge (Calcutta: The Asiatic Society, First published 1897-1921), 343. Abū'l Fazl is making a reference to Akbar engaged in hunting/trapping wild elephants in the jungles of Narwar in 1564, while putting down a rebellion caused by 'Abdu'llāh Khān Uzbeg, II, 345-53.
- 3 Abdul Hamid Lahōri, 2010, *Lahōri's Pādshāhnāmāh (1592-1638)*, trans. Hamid Afaq Siddiqi (Delhi: Idarah-i Idarah-i Adabiyat-i Delli), 57.
- 4 Abū'l Fazl, 2000, vol. II, 232. Abū'l Fazl is referring to Akbar mounting a *mast* elephant Hawai and engaging it in a fight in 1561.
- 5 Abū'l Fazl, 2000, vol. II, 232.
- 6 Mughal contributions to botanical studies have not been covered due to this chapter's emphasis on hunting.
- 7 Naṣīr al-Dīn al-Tūsi, 1964, *Akhlaq-i Naṣīrī* (The Nasirean Ethics), trans. GM Wickens (London: George Allen & Unwin); see especially 26-7, 30-1.
- 8 Peter Harrison, 2015, *The Territories of Science and Religion* (Chicago: Chicago University Press), 3.
- 9 Harrison, 2015, 3, 5, 90.
- 10 Sheldon Pollock, 2011, 'The Languages of Science in Early Modern India', in Sheldon Pollock, ed., *Forms of Knowledge in Early Modern Asia, Explorations in the Intellectual History of India and Tibet 1500-1800* (Durham: Duke University Press), 4, 21.
- 11 Irfan Habib, 1996, 'Reason and Science in Medieval India', in JN Jha, ed., *Society and Ideology in India, Essays in Honour of Professor RS Sharma* (New Delhi: Munshiram Manoharlal Publishers), 168.
- 12 Abū'l Fazl, 2010, vol. I, 289.
- 13 Abū'l Fazl, 2010, vol. I, 289.
- 14 Shah-Nawaz Khan, Nawab Samsam al-Dawla and Abdul Hayy, 1979, *Ma'athir-ul-Umara*, vol. I, trans. H Beveridge and Baini Prasad (Patna: Janaki Prakashan, first published 1911-52), 545.
- 15 Cited in Momin Mohiuddin, 1971, *The Chancellery and Persian Epistolography under the Mughals: From Babur to Shahjahan, 1526-1658: A Study on Inshā, Dar al-Insha, and Munshis Based on Original Documents* (Calcutta: Iran Society), 41, 228-34.
- 16 François Bernier, 1983, *Travels in the Mogul Empire AD 1656-1668*, trans. Archibald Constable (Oxford: Oxford University Press, first published 1934), 229.
- 17 Zuhuri, *Saqinamah-yi Zuhuri*, cited in Sunil Sharma, 2011, "'If there is a Paradise on Earth, it is Here": Urban Ethnography in Indo-Persian Poetic and Historic Texts', in Sheldon Pollock, ed., *Forms of Knowledge in Early Modern Asia, Explorations in the Intellectual History of India and Tibet 1500-1800* (Durham: Duke University Press), 245.
- 18 Abū'l Fazl, 2010, vol. III, 4-5.
- 19 A Rahman et al., 1982, *Science and Technology in Medieval India — A Bibliography of Source Materials in Sanskrit, Arabic and Persian* (New Delhi: Indian National Science Academy), xiv-xv. See also CA Storey, 1977, *Persian Literature, A Bio-Bibliographical Survey*, vol. II (Leiden: The Royal Asiatic Society of Great Britain and Ireland), 3, 442-5.

- 20 Pollock, 2011, 5.
- 21 Sharma, 2011, 240-1.
- 22 Zahiru'd-din Muhammad Pādshah Ghāzī Bābur, 1990, *Bābur-Nāma, The Memoirs of Babur*, trans. Annette Susannah Beveridge (New Delhi: Munshiram Manoharlal, first published 1921), 488-515.
- 23 Som Prakash Verma, 1999a, *Mughal Painter of Flora and Fauna, Ustad Mansur* (New Delhi: Abhinav Publications), 37.
- 24 Salim Ali, 1927, 'The Moghul Emperors of India as Naturalists and Sportsmen', *Journal of the Bombay Natural History Society*, Part I 31(4): 836.
- 25 Bābur, 1990, 489-90, 450-1.
- 26 Jahāngīr, 1999, *Jahāngīrnāma, Memoirs of Jahangir, Emperor of India*, trans. Wheeler Thackston (New York: Oxford University Press), 402-3; Jahangir, 2003, *Tūzuk-i Jahāngīrī, The Memoirs of Jahāngīr*, vol. II, trans. Alexander Rogers, ed. Henry Beveridge (New Delhi: Munshiram Manoharlal, first published 1909), 270.
- 27 The unusual characteristics of animals in the imperial menagerie and of the exotic species that were brought to court and described extensively by Jahāngīr are beyond the scope of this chapter, which mentions only those encountered during hunts. However, note that Jahāngīr's study of the breeding habits of sarus crane, and his observations on the gestation period of the elephant are considered pioneering work for the age. See Jahāngīr, 1999, 266, 269-70, 274, 277, 160. See also MA Alvi and A Rahman, 1968, *Jahangir — The Naturalist* (New Delhi: Indian National Science Academy), 5.
- 28 Ali, 1927, Part II, 32(1): 38.
- 29 Jahangir, 2003, vol. I, 352.
- 30 Jahangir, 2003, vol. I, 121-2. Note that 1 maund = 40 seers = ~37 kilograms.
- 31 Joseph Somogyi, 1950, 'Ad-Damiri's Hayat al-hayawan: An Arabic Zoological Lexicon', *Osiris* 9: 34.
- 32 Alvi and Rahman, 1968, 5.
- 33 Jahāngīr, 1999, 255, 339.
- 34 MA Alvi, 1999, 'Jahangir's Passion for Exotic Animals', in Som Prakash Verma, ed., *Flora and Fauna in Mughal Art* (Mumbai: Marg Publications), 91.
- 35 See Jahāngīr, 1999, 418, 207, 213, 316, 65. Jahāngīr carried out many other experiments including cross-breeding various species. However, only those performed during hunting have been highlighted.
- 36 Ebba Koch, 2009, 'Jahangir as Francis Bacon's Ideal of the King as an Observer and Investigator of Nature', *Journal of the Royal Asiatic Society of Great Britain and Ireland* 19(3): 328.
- 37 Verma, 1999a, 37.
- 38 Verma, 1999a, 22.
- 39 Jahāngīr, 1999, 133.
- 40 Koch, 2009, 298. See Jahāngīr, 1999, 133.
- 41 Jahāngīr, 1999, 339.
- 42 Som Prakash Verma, 1999b, 'Portraits of Birds and Animals under Jahangir', in Som Prakesh Verma, ed., *Flora and Fauna in Mughal Art* (Mumbai: Marg Publications), 13.
- 43 Verma, 1999b, 20.
- 44 See for instance Salim Ali, 1968, 'Dodo', in MA Alvi and A Rahman, *Jahangir — the Naturalist* (New Delhi: Indian National Science Academy), 15-17. A significant ornithological study of the Mauritian dodo is attributed to Mansūr, and is now in the St. Petersburg Album, St. Petersburg. It created much excitement at the XII International Ornithological Congress in Helsinki in 1958 when first unveiled as it is one of the earliest depictions of the bird, and it is now generally believed that it was painted from a living specimen. See also Alvi and Rahman, 1968, 4-9.
- 45 For discussions on Ikhtiyar al-Husaini's *Akhlāq-i Humāyuni* which is modelled on al-Ṭūsī's *Akhlāq-i Naṣīrī* and other *akhlāq* texts such as Jalal al-Din Muhammad Asad Dawani's *Akhlāq-i Jalālī* (1427-1521), see Iqtidar Alam Khan, 2009, 'Tracing Sources of Principles of Mughal Governance: A Critique of Recent Historiography', *Social Scientist* 37(5-6): 45-54; Muzaffar Alam, 2004, *The Languages of Political Islam, India 1200-1800* (Chicago: University of Chicago Press), 71-5; Muzaffar Alam, 2000, 'Akhlāqi Norms and Mughal Governance', in Muzaffar Alam et al, eds., *The Making of Indo-Persian Culture — Indian and French Studies* (New Delhi: Manohar Publishers), 67-95.

- 46 Alam, 2004, 5, 77 (emphasis in original).
- 47 Jahāngīr, 1999, 360.
- 48 Seyyed Hossein Nasr, 1976, *Islamic Science: An Illustrated Study* (England: World of Islam Festival Publishing Company Limited), 66.
- 49 Jalal al-Din Muhammad Asad Dawani, 1895 (*Akhlaq-i-Jalāli*), *The Akhlak-i-Jalaly, Practical Philosophy of the Muhammadan People*, trans. WF Thompson (Lahore: Caxton Printing Works), 27.
- 50 Al-Ghazālī, 1964, *Naṣīḥat al-Muluk of al-Ghazālī* (Counsel for Kings), trans. FRC Bagley, ed. Huma'i Jalal (London: Oxford University Press), 80.
- 51 Abū'l Fazl, 1998, Akbar's '*Dasturu'l-'amal* (A Circular Enumerating the Duties of Officers) Addressed to the 'Ummāl and Mutasaddis of the Empire (21 March 1594)', in Mansura Haidar, trans., *Mukātabāt-i-'Allāmī (Inshā'i Abū'l Fazl)* (New Delhi: Munshiram Manoharlal), 83.
- 52 Khaliq Ahmad Nizami, 1989, *Akbar and Religion* (New Delhi: Idarah-i-Adabiyat-i-Delli), 185.
- 53 Rosalind O'Hanlon, 2007, 'Kingdom, Household and Body History: Gender and Imperial Service under Akbar', *Modern Asian Studies* 41(5): 898.
- 54 See Dawani, 1895, 153. Jalali notes that a king's 'proper return for this magnificent appointment [sovereignty] is the observance of equity towards God's creatures and his own subjects'.
- 55 Al-Ṭūsī, 1964, 188-9.
- 56 Abū'l Fazl, 2010, vol. I. Elephants 123-39, horses 140-50, camels 151-6.
- 57 Abū'l Fazl, 2010, vol. I, 140.
- 58 Audrey Truschke, 2016, *Culture of Encounters: Sanskrit at the Mughal Court* (New York: Colombia University Press), 4-5, 142.
- 59 Rahman et al., 1982, 531-48.
- 60 See for instance George Sarton, 1947, *Introduction to the History of Science: Science and Learning in the Fourteenth Century*, vol. III (Baltimore: Williams and Wilkins) 1, 107.
- 61 Jahāngīr, 1999, 145-6.
- 62 Pietro della Valle, 1892, *The Travels of Pietro della Valle in India*, vol. I, trans. G Havers, ed. Edward Grey (London: Hakluyt Society), 67-8.
- 63 Jean de Thevenot, 1687, *The Travels of Monsieur de Thevenot into the Levant in Three Parts, viz. into I. Turkey, II. Persia, III. The East-Indies, Newly Done out of French*, vol. III, trans. Archibald Lovell (London: H Clark), 11-13, 41.
- 64 Niccolao Manucci, 1907, *Storia do Mogor or Mogul India 1653-1708*, vol. I, trans. William Irvine (London: John Murray), 197.
- 65 Bābur, 1990, 140, 473.
- 66 See for instance Bābur, 1990, 325. Bābur's descriptions regarding getting into position and turning movements before delivering the final blow to the wild ass during the 1507 *qamarghā* in Kattavaz plain are indicative of a *tūlghuma* movement.
- 67 Bābur, 1990, 155.
- 68 Bābur, 1990, 465-74.
- 69 Abū'l Fazl, 2000, vol. I, 264-5. See also Bābur, 1990, 563-73.
- 70 Abū'l Fazl, 2000, vol. II, 416-17.
- 71 Abū'l Fazl, 2000, vol. II, 416, fn. 2.
- 72 O'Hanlon, 2007, 898.
- 73 Divyabhanusinh, 1999, 'Hunting in Mughal Painting', in Som Prakash Verma, ed., *Flora and Fauna in Mughal Art* (Mumbai: Marg Publications), 103-4.
- 74 Abū'l Fazl, 2010, vol. I, 296-7, 299. See also Fr. Monserrate, 1922, *The Commentary of Father Monserrate on the Journey to the Court of Akbar*, trans. JH Hoyland, annotated SN Banerjee (London: Oxford University Press), 77-8.
- 75 See Abū'l Fazl, 2000, vol. II, 539. See also Divyabhanusinh, 1999, 98.
- 76 John Correia-Afonso, 1980, *Letters from the Mughal Court, The First Jesuit Mission to Akbar (1580-1583)* (Anand: Gujarat Sahitya Prakash), 56. (See Fr. Acquaviva's letter to Fr. Mercurian in 1580.)

- 77 Abū'l Fazl, 2010, vol. I, 47-9, 55-7. See also Muhammad Ārif Qandahāri, 1993, *Tārīkh-i Akbarī*, trans. Tasneem Ahmad (New Delhi: Pragati Publications), 61-2. For reconstructions of these devices, see Irfan Habib, 1997, 'Akbar and Technology', in Irfan Habib, ed., *Akbar and his India* (New Delhi: Oxford University Press), 129-48. See also MA Alvi and A Rahman, 1940, *Fathullah Shirazi, a Sixteenth Century Indian Scientist* (Delhi: National Institute of Sciences of India), 4-8.
- 78 Abū'l Fazl, 2010, vol. I, 58. Water was poured into a sealed metallic bottle and moved around a pan containing a mixture of water and saltpetre cooling it in about 12 minutes. Saltpetre is potassium nitrate. When added to water, there is an endothermic reaction which has the effect of cooling the surrounding water. See also Abū'l Fazl, 2010, vol. I, 285.
- 79 Abū'l Fazl, 2010, vol. I, 285.
- 80 Abū'l Fazl, 2010, vol. I, 120.
- 81 Irfan Habib, 1980, 'The Technology and Economy of Mughal India', *Indian Economic and Social History Review* 17(1): 17.
- 82 Abū'l Fazl, 2010, vol. I, 122. Abu'l Fazl's drawing of the *barghū* is in the *Ā'in-i Akbarī* MS Add. 7652, British Library.
- 83 Habib, 1997, 140-1; Alvi and Rahman, 1940, 5-7.
- 84 Abū'l Fazl, 2010, vol. I, 120. The gun-barrel was flattened and twisted obliquely in a roll with overlapping edges, and then joined over an iron rod to form a barrel. Akbar supposedly supervised every step of the prototypes's manufacture, suggesting improvements and making trials at every stage.
- 85 Dawani, 1895, 156, 161.
- 86 O'Hanlon, 2007, 902.
- 87 *Pādshāhnāma*, meaning 'Chronicle of the King of the World', is a biography and history of the Emperor Shahjahan's reign (1628-58) by the court historian Abdul-Hamid Lahori. The Royal Collections' manuscript is extensively illustrated.
- 88 Koch, 1997, in Milo Cleveland Beach and Ebba Koch, *King of the World: The Padshahnama, An Imperial Mughal Manuscript from the Royal Library, Windsor Castle* (London: Azimuth Editions), 193.
- 89 Koch, 1997, 193.
- 90 See for instance Toby E. Huff, 2003, *The Rise of Early Modern Science: Islam, China and the West*, 2nd ed. (Cambridge, UK: Cambridge University Press), 84.
- 91 See for instance the Translator's Preface to *Dabistan* by its Orientalist translators, Shea and Troyner, and their critical viewpoint, 9-11. *Dabistan-i Mazahib* is a Mughal text of comparative religions of Mughal India; it explores the complexities of religious tolerance of the age. Its attribution to Mohsan Fānī by the translators is questionable.
- 92 Bernier, 1983, 229.
- 93 Bernier, 1983, 324-5, 352-3. See also Mohamad Tavakoli-Targhi, 2011, 'Early Persian Modernity', in Sheldon Pollock, ed., *Forms of Knowledge in Early Modern Asia, Explorations in the Intellectual History of India and Tibet 1500-1800* (Durham: Duke University Press), 264-5.
- 94 Somogyi, 1950, 33.
- 95 Abū'l Fazl, 2010, vol. III, 4-5.
- 96 Iqbal Ghani Khan, 1997, 'Scientific Concepts in Abu'l Fazl's *Ain-i Akbarī*', in Irfan Habib, ed., *Akbar and his India* (New Delhi: Oxford University Press), 128.
- 97 Habib, 1996, 163.
- 98 Habib, 1996, 163.

CHAPTER 5

The Artist's Gaze: Visual Representations of the Mughal Hunting Landscape

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THE ARTIST'S GAZE: VISUAL REPRESENTATIONS OF THE MUGHAL HUNTING LANDSCAPE

ABSTRACT

The Mughals created and experienced the hunting ground, the shikargah, as a complex space which they described in textual and visual modes, revealing their cultural, political, and spiritual world views. This chapter explores the visual depictions of the hunting ground from the perspective of the Mughal artist. It aims to show the artist's ways of seeing this constructed landscape: how spaces are represented, actors are staged, and political messages are communicated. It argues that the artistic depiction of the shikargah was cloaked in layers of meanings that reflected the court's ideological concerns. The hunting painting genre was primarily used as a commemoration of memorable hunts, which were also successful military campaigns, and hence served propaganda purposes. They were also used to project kingship and memory of the Timurids, and to communicate interwoven spiritual parallels. The chapter shows how the Mughal artist relied on his intellect, experience, and insight to produce a distinct set of artistic tools, viewing choices, and visual hermeneutics to convey these composite ideals through the iconic pictorial space of the shikargah. Through a recurrent use of certain visual metaphors, painterly techniques, and established pictorial traditions available at the kitabkhana (studio-scriptorium), the artist was able to set up an active gazing relationship with his 16th and 17th century viewers. The chapter also shows how select leitmotifs, distinct pictorial organisations, as well as other devices were used by the artist as communicative tools to help the viewers decode these signs as projections of Mughal power enmeshed in the hunting paradigm while simultaneously offering them an aesthetically pleasing experience.

This chapter explores the visual depictions of the imperial hunting ground, the *shikargah*, from the perspective of the Mughal artist. It examines the Mughal artist's 'ways of seeing' the hunting landscape as expressed in Mughal paintings. The idea of a 'hunting landscape' refers to a conception of a 'natural' space in which controlled and ordered actions by the emperors were staged and/or inserted to give the depicted landscape an imperial identity. 'Ways of seeing' refers to the way in which the Mughals conceptualised and viewed their hunting spaces, and their mediation of the hunting environment. The *shikargah* was intentionally created as a complex space, and constructed with a view to projecting the cultural, political, and spiritual world views of the Mughals. The Mughals' ideological principles were set out in texts and reflected in

visual depictions. Paintings were a conventional agency to visually document historical events set out in written texts, and served the viewer a dual experience of *reading* the texts and *seeing* the corresponding image. This study aims to show the artist's ways of seeing this constructed landscape: how spaces were represented, actors were staged, and political messages were communicated. It argues that the artistic depiction of the *shikargah* was cloaked in layers of meanings that reflected the court's ideological concerns. The painting, however, was more than a visual reproduction of the written word as the pictorial language of the painting was meant to guide the viewer into seeing a complex set of relationships underlying the desired aesthetic experience. The hunting painting genre was used for a number of purposes that included recording visual data and commemorating memorable hunts which were also successful military campaigns and hence served propaganda purposes. They also served to project kingship which was grounded in the legacy of their Timurid ancestors. This chapter shows how the Mughal artist offered his 16th- and 17th-century viewers a multitude of platforms to see and appreciate the hunting landscapes as allegories of kingship, spirituality, nostalgia and memory of their illustrious forebears through the iconic pictorial space of the hunting landscape.

In *Landscape and Power*, W. J. T. Mitchell offers a meaning of 'landscape' as a space 'embedded in a tradition of cultural signification and communication, a body of symbolic forms capable of being invoked and reshaped to express meanings and values.'¹ This paper engages with Mitchell's idea of the 'landscape' as 'a medium of cultural expression'² to frame the Mughal hunting landscape. The symbolic landscape of the Mughal *shikargah* was grounded in ancient Persian and Timurid traditions of cultural and political signification. In a previous paper I examined the physical processes of modifying the environment of the hunting ground into a rational and ordered aesthetic, in which various political functions were staged that carried semiotics of power and control.³ The manipulated landscape of the *shikargah-i muqarrar* (favoured and frequented imperial hunting grounds), seen as a metaphorical space of the emperor's domain, best exemplifies the relationship of the emperors with nature and how they experienced their world. Translating these multi-layered ideals of the hunting landscape into visual narratives was a complex process that required thoughtful discrimination on

the part of the artist regarding his narrative mode, selection of descriptive details, and prevalent social and artistic conventions whilst still retaining identity with the related textual descriptions. The resulting composition of the emperor indulging in the act of a favoured royal pastime is usually an allegory that thematises the political, social and artistic representation of the hunt and the hunting ground. Importantly, it is a visualisation of the Mughal world view refracted through the culture of the hunt. It is with these perspectives in mind that this chapter sets out to discuss the Mughal hunting landscape with reference to its interwoven cultural, political, and social concerns. The essay concerns the nuances of visual representation of the Mughal culture of the hunt in general and the *shikargah* landscapes in particular.⁴ Spiritual experiences that were frequently invoked in the *shikargah* and attributed to the prevalent Sufi ideology in the primary texts are also discussed in the paper, and importantly, how such spiritual parallels affected the artists' depiction of the hunting painting. The creative gaze of the artist is what gave the hunting painting its emotive and ideological force, and aided the formulation of a unique Mughal mode of seeing.

A number of art historians have analysed Mughal paintings in general. They have covered many different aspects of the paintings such as visual traditions and characteristics, identification of the artist and attributions, identification of the depicted subjects, and techniques and stylistic comparisons with Western art forms.⁵ Few, however, have focused exclusively on the hunting genre.⁶ Art historian Gregory Minissale's exceptional work offers new insights to understanding the aesthetic experience of Mughal paintings by highlighting salient concepts and conventions, pictorial order, symbolism and artistic structures.⁷ This chapter engages with selected aspects of the work of Minissale and other art historians but examines these facets from a hunting perspective with a view to understanding the artist's rationale in his visual construction of the *shikargah*. The chapter also draws references to *akhlaqi* ethical texts and traditional Persian painting treatises which likely influenced the Mughal artist in his portrayal of the emperor and the hunting ground.

The chapter shows how the Mughal artist relied on his intellect, experience, and insight to produce a distinct set of artistic tools, viewing choices, and visual hermeneutics to convey the composite ideals of the court. Through a recurrent use of certain visual

metaphors, painterly techniques, and established pictorial traditions available at the *kitabkhana* (studio-scriptorium), the artist was able to set up an active gazing relationship with his viewers which then enabled him to visually present the scope of Mughal imperial power and its distinct cultural identity. The chapter also shows how select leitmotifs, distinct pictorial organisations, as well as other devices were used by the artist as communicative tools to help the viewers decode these signs as projections of Mughal power enmeshed in the hunting paradigm while simultaneously offering them an aesthetically pleasing experience.

***Taswir* and Narrative Art**

The early Mughal painting in Akbar's atelier is best described as narrative art, as court histories were composed as written texts with corresponding illustrations that were meant to guide the reading of the text.⁸ Visual representations of courtly, political and historical events, ancient Persian and Indian epics, victorious battles, memorable hunting scenes and other notions of sovereignty that were highlighted in monumental panegyric biographies commissioned by the emperors, and memoirs thus became a requisite medium through which to communicate the evolving Mughal vision of kingship, and served as 'tangible evidence of wealth, intelligence, and power.'⁹ Imperial patronage enabled the assemblage of regional and Persian artists, Muslims and non-Muslims, trained in multicultural traditions of visuality, who worked together in a collaborative effort. Visual production involved three separate components by specialist artists: *tarh* or composition by a master artist, *chihranami* or painting of faces by a specialist, and *rangmizi* or colouring and modelling of bodies by possibly another artist. This practice 'proved indispensable in forming an independent style (*qalam*), though within the limits of the composite style, of the Mughal school'.¹⁰ By Jahangir's reign, however, the collaborative practice was increasingly superseded by different specialisations. At its essence, Mughal painting is strongly inclined towards Persian art, namely Herati late-Timurid, Turcoman, and Tabrizi-Safavid art brought to court by Iranian master artists. This was enriched by pictorial traditions of various regions of north India, and Sultanate styles, along with the European pictorialities, primarily Italian Albertian and Flemish. The evolving Mughal style was formulated by a selective synthesis of the above

traditions. Although derived from a variety of visual regimes, the Mughals' foremost consideration was that the style be reflective of their own pluralistic cultural identity – related to and yet independent of the Timurids.

Akbar's awareness for realism ensured that it was a defining element in Mughal art. Abu'l Fazl defines the 'picture' as: 'Drawing the likeness of anything is called *taswir*', adding, 'the minuteness in detail, the boldness of execution, etc., now observed in pictures, are incomparable; even inanimate objects look as if they had life'.¹¹ Mughals' pictorial language was created by re-configuring the idealistic form of the late-Timurid and Safavid styles, and transformed with a focus on plastic realism and naturalism, while still retaining the Timurid iconographic vocabulary and cultural context. As aesthetic theorist Valerie Gonzalez notes: 'The internalizing gaze regime informed by the Persianate logocentric poetic culture inherited by the Mughals had mutated into an Indo-Mughal mode of seeing based on a more direct sensory experience of reality'.¹² Although Mughal artists experimented with yet more forms of naturalism adopted from European art that were brought to court from the 1570s, this is not the illusionist painting techniques used by contemporaneous European painters to project a sense of realism of three-dimensional objects onto a two-dimensional surface. In effect, the Mughal artist may not have had an intent, or interest, to reproduce a mirror image illusionism of the original. As Safavid librarian Sadiqi Bek notes in his painting treatise, *Qanun al-suwar* (1597), that in the 'genre of [representational painting] the shifting values of observation are not a desideratum; instead a solicitude for past models is at a premium,' adding 'repeating a pattern may have some magical appeal; but, by nature this palls and becomes all monotonous'.¹³ Yves Porter opines that these sentiments indicate that 'the task of the painter is not to copy nature but to go beyond it to reach the world of ideas.'¹⁴ What is important to note is that the Mughal artist's intent to produce an aesthetically pleasing picture seems to have taken into consideration the long tradition of seeing a picture as an experience – it was intended to be thought-provoking, and evocative of pleasure, power and allegory. The anti- or non-illusionistic nature of representation and perception of Mughal naturalism is hence based on idealised nature, not pure observation, and based on the symmetry, balance and order reflected in the natural world.¹⁵ This model became a valuable instrument that could visually project the distinct political culture of the dynasty.

Central to the Mughal formulation of kingship was the image of the emperor as a hunter-warrior. Abu'l Fazl drew on *akhlaqi* models of ethical texts, such as Nasir al-Din Tusi's *Akhlaq-i Nasiri*, to secure for Akbar an image of *insan-i kamil*, the perfect man, who was enlightened and brave among other virtues.¹⁶ The depiction of the imperial hunter displaying superior vitality during the hunt, and simultaneously receptive to the natural world best exemplified these notions.

Picturing the Hunting Landscape

The Mughal society and lifestyle was highly structured and ordered. The modified landscape of the *shikargah-i muqarrar* was seen as the emperor's imprint over nature in order to domesticate its wild and often hostile forms, and impose ecological order and balance.¹⁷ Its pictorial representation similarly incorporated organising principles of balance and proportion, stylised natural forms, and the geometric ordering of the pictorial space into a linear aesthetic to project cultural and political expression. As Islamic art historian Gülru Necipoğlu notes: 'despite its increasing naturalism the Mughal visual idiom was still bound to a conventional modal system of aesthetics'.¹⁸ The artistic representation of the hunting landscape thus referred to a conceptual rather than a material space. To borrow semiotician Ferdinand de Saussure's terminology, the Mughal hunting scape is both, the signifier and the signified.

The Mughals favoured several different hunting techniques, and art historian Ebba Koch has suggested that the representation of the landscape is connected to the hunting technique depicted.¹⁹ Here it is important to take into account the extensive physical transformations that were undertaken to accommodate the particular hunt, such as the driving in of wild animals by beaters often from other habitats, selective clearance of forests, and blocking of rivers, often only lasting the duration of the hunt. Artists travelling with the imperial entourage to various *shikargahs* sited across the empire were no doubt aware of the modified landscape they represented in their paintings.

The depiction of the *qamargha* battue ring hunt, which lasted several days and packed thousands of animals driven into the arena, required the artist to communicate the intensity of the drama and raw energy as they swirled around the ring, juxtaposed with

the image of the emperor who appears in perfect command of the undoubtedly chaotic situation. The artist was also expected to closely follow the written narrative.

Figure 1. Akbar hunts with cheetahs in a qamargha ring in Lahore in 1567.
Painted by Miskina with Mansur and Sarwan
IS.2.55-1896 and IS.2.56-1896
© Victoria and Albert Museum, London

In Figure 1, the painting entitled *Akbar Hunts near Lahore in 1567*, depicts the *qamargha* organised for Akbar and described at length by Abu'l Fazl.²⁰ The artist Miskina has compressed time and space into a collage comprising the different stages of five days of hunting into a single two-dimensional double page illustration. He denotes movement by 'redrawing space and locating objects and persons in it at multiple points'.²¹ The colourists Mansur and Sarwan have applied selective modelling to the animal bodies, presenting an accurate depiction of the fauna of the Salt Range,²² and rendered as naturalistic yet stylised linear design. Miskina evenly distributes visual interest over the whole painted surface by portraying several modules of events, movements, and man-nature relationships which gradually lock together as a unified hunting scene.

From the reign of Shahjahan the decoy-drive hunt, the *shikar-i ahu ba ahu*, became a favoured form of the sport; decoy animals were used to lure game and used as 'stops' to drive in and confine prey to the desired area of the hunting party. Their visual representations comprise six known paintings, and constitute a distinct type of landscape painting and are chiefly attributed to Payag. The hunts take place in modified landscapes that have been reordered with selective clearing of trees, scrub, and groundcover so that the royal hunting party remain hidden but the decoy animals are highly visible.²³

Figure 2. Dara-Shikoh hunting nilgais
Attributed to Payag
Freer Sackler S 1993.42a-c

In Figure 2, *Dara-Shikoh Shooting Nilgais*, Koch draws attention to the fact that it was during the decoy hunt that the imperial hunter had the leisure to observe nature, and that with this technique, there was a corresponding shift in artistic focus to render the hunting landscape with a new naturalism.²⁴ Payag's rendition of the *shikargah* with increased naturalism signals a more harmonious relationship between the imperial hunter and the

ecology. Through painterly techniques, such as light and shadow, colour washes, microscopic brush strokes, planar figure arrangements, and a geometrical compositional placement of humans and animals, all depth-producing devices, the artist has animated nature and the landscape.²⁵ Although the figure of the imperial hunter in a decoy hunt exhibits far less physical vitality than the image of say Akbar in a *qamargha*, the naturalistic rendition of the landscape by the artist enhances the emotive narrative of the hunt. In a related painting, *Shah Shuja Hunting Nilgai*, art historian Ellen Smart notes that the artist has created an enormous space by setting the hunt against dramatically receding hills or plains which adds to the grandeur of the occasion usually seen in *darbar* paintings set in sumptuous architectural settings.²⁶ While the tension and excitement of the hunters have been captured with exactitude by the artist, it is his rendering of the landscape that guides the viewer into the depth and mood of the hunt.

Geometric Organisation of the Hunting Painting

The Mughal artist relied on a stock of established motifs, pictorial order and conventions, and stylistic techniques that evolved from Persianate traditions and became part of the visual language of the *kitabkhana*; these were repeatedly used as mnemonic devices to communicate and signal an instantly recognisable meaning of the painting to the viewer. The geometrical organisation of the spatial and figural pictorial space into dynamic forms that comprised spirals, triangles, parallels and hexagons was created by the artist to help the viewer to decode the layers of meanings he had inserted into the painting which could impart different values and interpretations to the viewer while simultaneously enhancing the aesthetic effect. In Mughal hunting paintings, the geometric spatial and figural (including animals) arrangement organised in the *tarh* by the artist was likely intended to engage the viewer towards the image of the imperial warrior-hunter, and by extension, the *shikargah* as a symbolic space of power. It also draws attention to the practical aspects of the hunt, such as regional wildlife, choice of firearms, and the general Mughal hunting culture and its trappings.

In Figure 1, Miskina's choice of the compositional schema, the *tarh*, makes use of the circular arena of the ring to compose a spiral formation using the royal tent at the centre from which concentric circles are measured to the perimeter of the *shakhbandh*

fence. This geometrical pictorial order has been used to convince the viewer of the swiftness of the hunt and movement of humans and animals, and serves to direct the viewer's gaze through the hunting spectacle. The image of Akbar in warrior mode at the centre of both pages, one holding a sword, and the other armed with a bow and arrows, is another device used by Miskina to retain and communicate the iconographic vocabulary of Akbar having a 'cosmogonical' quality in a geometric form. He is the cosmic centre 'around which all satellite forms rotate'.²⁷ Miskina seems to have taken the artistic liberty to move the royal tent to the centre of the painting; it is normally situated a good distance away from the arena according to the *A'in*.²⁸ Although the tent is sited in the middle of the composition, rather than becoming its focal point it appears to give primacy to Akbar's persona while itself being subordinated by the active hunting landscape. Miskina thus actively engages the viewer's gaze to move through each stage of the pictorial narrative and connect the dots as it becomes a unified picture in the mind's eye. These notions are far removed from long held views of the perception and representation of landscape in the West: 'It seems that until fairly recent times men looked at nature as an assemblage of isolated objects, without connecting trees, rivers, mountains, roads, rocks, and forest into a unified scene.'²⁹

In the Chester Beatty painting, *Aurangzeb Hunting Nilgai*, the parallel s-lines of the compositional device leads the viewer's eye to an important characteristic of the hunt as an extension of the court. The group of courtiers and grandees dressed in elaborate courtly attire seated on elephants have taken their place at an appropriate distance from the hunting scene as a group of musicians, the *nauba*, entertain the hunting party. A large number of footmen are seen discreetly lining the arena to ensure that the prey does not escape as the success of the hunt was taken as an omen that could foretell the success of a campaign.

In Figure 2, the triangular spatial compositional device used by Payag to reorder the painting formed by the placement of the royal hunter Prince Dara-Shikoh in the middleground and two groups of huntsmen crouched behind decoy cows in the fore- and backgrounds leads the viewer into the painting's psychological depth to discover the emotional tension between the hunter and the animal that is about to drop dead. Just as the *shikargah* was created by a structured reordering of nature, its pictorial rendition was

similarly aesthetically ordered. As Minisalle notes, the rational geometry created by the artist leads the viewer into different ways of seeing – one to do with ‘external senses’ which is dictated by the optical experience of what the eye observes, and the other to do with ‘internal senses’ which understands and analyses the geometry and proportion of the painted image. It is this interplay that guides the viewer between experiencing the painting in the manuscript and the mental image created through reading the textual description.³⁰

Depiction of the Image of the Emperor

The artist’s portrayal of the emperor as the imperial hunter displaying bravery, vitality and dynamism took centre stage in the hunting paintings. This recurrent image was used as the most important pictorial convention by the artist to communicate to the viewer of emperor’s complex relationship with the hunting landscape. Abu’l Fazl’s characterisation of Akbar inspired by a direct reference to Suhrawardi’s *ishraqi* philosophy of illumination, his devotion to the Chishtiyya Sufi order, and *akhlaq* ethical texts is that of the *insan-i kamil*, or perfect man, and an ideal ruler who was endowed with virtuous qualities, and whose sovereignty was divinely sanctioned.

Figure 3. Akbar Kills a Tigress defending her Offspring
Left: Basawan with Sarwan IS. 2:18-1896
Right: Basawan with Tara the Elder IS. 2:17-1896
© Victoria and Albert Museum, London

Abu’l Fazl’s imagery of Akbar’s illumined persona was translated into painting by three classic pictorial devices that were used successfully in hunting images: he is depicted proportionately larger than surrounding figures suggestive of his morally and spiritually exalted status. His figure is made to stand out because the artist conventionally leaves an area immediately surrounding him devoid of other figures (Figure 1 and Figure 3). He is always portrayed in a tranquil manner even in the face of adversity and terror, particularly during hunting, reflecting his extraordinary spiritual standing.³¹ A more detailed discussion of the link between *ishraqi* illumination theory and the image of the emperor as hunter-warrior-philosopher follows later. O’Hanlon, who has referenced Abu’l Fazl’s interpretation of influential ethical texts, particularly the *Akhlaq-i Nasiri* to

construct a ‘socially inclusive model of masculine virtue’, notes that in hunting paintings, Akbar is portrayed as being ‘profoundly attuned to the subtle ecological balance of the land and its people’.³² It is in the depictions of impromptu hunts when unexpectedly confronted by large beasts that the emperor’s relationship with the hunting landscape is truly demonstrated, perhaps even more so than the illustrations of the staged *qamargha*. One such incident happened in 1561, when Akbar and his entourage were encamped in Sarangpur near Narwar. Akbar’s hunting party was unexpectedly attacked by a ferocious tigress protecting her five cubs. Abu’l Fazl records that while Akbar’s courtiers froze, he showed remarkable bravery as he felled the tigress, his first ever, with a single stroke.³³ In the double page composition *Akbar Kills a Tigress defending her Offspring* (Figure 3), Basawan (with colourists Sarwan and Tara the Elder) has captured the moment that Akbar has just struck the fatal blow while his companions, in a state of disarray and confusion, kill the cubs and the spectators look on in amazement. Basawan used a pictorial language of stylised naturalism to depict figures, animals and vegetation into which he inserted the dynamic image of Akbar hunting as the focal point of a spiral composition. This visual arrangement leads the viewer to follow the stages of the unfolding narrative, enabling him to immediately recognise the meaning of the painting as an idiom of power: the imperial hunter rising above the mayhem around him in a composed manner. By depicting Akbar as proportionately larger than other figures, Basawan visually affirms his superior status. While political overtones may have been one of the functions of the hunting paintings, Mughal texts are emphatic about the aesthetic concerns regarding composition and style, and artistic creativity through which ‘even inanimate objects look as if they had life’.³⁴ Basawan shows a selective use of abstraction of the landscape where the immediate action takes place to enhance the figural presence and body language of Akbar. Much of the dramatic visual effects are rendered by the depiction of the hunting landscape as a frenzied space of trees and rock formations that animate the hunting scene alongside the theatrical poses of the huntsmen and the exaggerated gesturing of the onlookers. Basawan’s image of the Emperor displaying the physical vitality of a brave hunter in an act of public service to his subjects creates several layers of the significance of the hunt as an instrument of kingship and good governance. It also engages the viewer to reflect on the notion of the Mughal artist’s

ways of seeing the *shikargah* as an imperial landscape symbolic of power. Such considerations are far removed from mainstream art historical analyses of the Akbari hunting landscapes as ‘basically space between the figures with stylized elements of rocks and trees on the top for background’.³⁵

The Encampment and ‘Ensigns of Royalty’

The Mughals emulated the peripatetic lifestyle of their illustrious forebears, the Timurids, travelling *en masse* with their entire household, courts and armies, turning gardens and *shikargahs* enroute into encampment sites that became ‘a mobile capital containing all the necessary parts of the central administration’.³⁶ These frequent movements, referred to as ‘hunting expeditions’, served to consolidate their authority over the distant parts of the empire. The *shikargah* hence became an assemblage of all the regalia of power which Abu’l Fazl calls ‘The Ensigns of Royalty’ in the *A’in*.³⁷ Of the visual signifiers he mentions the *chatr* (umbrella), *sayaban* (fan for shade usually oval shaped), the *qur-i khassa* (the collection of ceremonial flags) and the *‘alam* (standard) were part of the hunting paraphernalia.³⁸ Abu’l Fazl notes that the *chatrtoq* and *tumantoq* *‘alams*, of Timurid origin and adorned with yak tails, were ‘flags of the highest dignity’.³⁹ In hunting and encampment paintings the *sayaban*, *‘alam* and flags would have been recognised for their ‘emblematic significance’⁴⁰ and the imperial nature of the encampment. In Figure 3, Basawan has depicted an array of tents, domesticated animals, palanquins, flag and standard bearers, and even a water-lifting contraption in the background as necessary accoutrements of the hunting party. He has also illustrated a cityscape juxtaposed with tents in the composition probably intended to indicate a conventional Mughal custom which entailed the imperial hunting expedition encamping in gardens and *shikargahs* outside the city until an auspicious time was chosen for entry or exit.⁴¹

*Figure 4. A royal hunting procession, c.1635,
Folio 166B, RCIN 1005021, Padshahnama.
Royal Collection Trust/© Her Majesty Queen Elizabeth II 2016*

In Figure 4, the so-called ‘Kashmiri Painter’ has depicted the entourage moving through the countryside between Lahore and Agra in March 1634 in the Windsor *Padshahnama*. Beach and Koch opine that it was originally intended to be a double-page scene and that its more important half showing the imperial actors is missing.⁴² The artist has depicted a cheetah in the *palkhi* (litter) and a falcon to indicate a royal hunting expedition. The opulence of the textiles on the saddles of the horses, arms, ‘*alams* and the *qur-i khasa* with the lion and sun symbol (*sher-u-khurshid*) carried on elephants and horses are suggestive of imperial ceremonial paraphernalia.⁴³ Koch has highlighted the explanation of Shahjahan’s historian Kanbo that these items formed ‘an element of the ruler’s magnificence (*shukoh-i dawlat*)’ and meant to enhance his status.⁴⁴ It is also a portrayal of the ultimate duty of the just emperor who was concerned about the welfare of his subjects as the long procession is seen passing through an unidentified city where farmers are engaged in generic agricultural activities; a large irrigation tank, a city and a fortress can be seen in the distance. In visualising the lofty ideals of the political nature of the imperial hunt, the artist hence relied on a bank of imperial idioms that were reconfigured into a visual language; in the above illustration the artist has conveyed the imperial nature of the encampment through a set of recognisable symbols, even though the royal hunters are not depicted.

The Cityscape

The depiction of a skyline of distant cityscapes receding from the painting’s foreground is a conventional and recognisable stylistic expression employed by the artists of the *kitabkhana* during the reigns of Akbar, Jahangir and Shahjahan, and rendered as three-dimensional vistas of Indian architectural forms. Art historians generally observe that this is a European device to create space, depth and realism to two-dimensional landscapes and seen as Indian adaptations of Flemish landscapes.⁴⁵ Here Koch refers to two forms of cityscapes: one is a panoramic landscape rendered as a colour wash in opaque colours which appears behind the central figure, and the other appearing as an illusionistic vista at the top of the plane of the figure ground.⁴⁶ While this atmospheric colour washed rendition of architectural forms certainly has European origins, depictions of distant cityscapes seems to have entered the Mughal visual vocabulary from possibly the earliest

known works of Mughal origin, now called the Fitzwilliam Album, and attributable to Humayun's patronage.

Figure 5. Prince Akbar Hunting a Nilgae
c.1555-1600
Fitzwilliam Album, Fitzwilliam Museum, PD 72-1948

A cityscape and fort feature in the background of Figure 5, *Prince Akbar Hunting a Nilgae*, c.1555, now considered the most important page in the Album as it is an exact depiction of a hunt that happened on 20th July, 1555. Hence, it is a 'documentary image of an historical subject, and there is no reason to doubt that it was painted at the time of the hunt'.⁴⁷ Beach also notes the painting's significance as it exemplifies the distinctive style that developed under Humayun's patronage; local traditions brought by Indian artists were adapted to this particular style.⁴⁸ Vividly painted cityscapes are also seen in the *Hamzanama*, another early illustrated epic emerging from the young Akbar's atelier in the early 1560s and therefore predates the Mughal-European artistic encounter, and can be seen as precursors to the later pastel colour-washed forms.⁴⁹ In hunting paintings these cityscapes could have some significance as the proximity of *shikargahs* and wildlife to urban contexts was a source of great pride to the Mughals and celebrated in court chronicles.⁵⁰ The cityscape seen in Figure 3 for instance, could be a reference to Narwar town and fort where the hunt took place; it was developed into a *shikargah-i muqarrar* following Akbar's first hunt there in 1564.⁵¹

Two Hunting Motifs

i. The cheetah on the cart

Carriage of captured and tamed cheetahs in carts and litters, often blindfolded to increase their hunting prowess, was a standard mode of transportation of these beloved hunting partners.⁵² As such the motif is a ubiquitous device used by Mughal artists; the method of carriage varies – they are carried by men in *palkhis*, on bullock carts, on elephant back or held by its keepers on a leash. While the motif is indicative of the prime of place given to cheetahs as valued hunting animals, it also serves to signify the calculated stratagem of the imperial hunt. The hunting expedition which started as a tour of 'sight-seeing and hunting' (*sair u shikar*) was often an ideal means of moving armies to rebel territories without provoking suspicion. The image *Adham Khan Pays Homage to Akbar* (V&A IS

2-1896) by Khem Karan depicts the monumental surrender of Adham Khan against the backdrop of the imposing Sarangpur fort in 1561.⁵³ Using the pretext of the hunt to intimidate Adham Khan and force his submission is symbolically represented by a blindfolded cheetah carried by two footmen in a *palkhi* in the foreground, and a falconer with his bird of prey perched on his arm in the right centre.

ii. Cheetah attacking a blackbuck

The presence of wild and belligerent elements within nature, and imperial intervention to subdue and domesticate these forces, and impose order and was a foundational ideological concern for undertaking the hunt. This was thematised in Mughal painting by the depiction of stronger animals killing weaker ones. In early Jahangiri albums a favoured trope emerges: a trained, collared cheetah which has run down a blackbuck and depicted at the precise moment of strangulation. In the Chester Beatty painting, *Salim Kills a Rhinoceros and a Lion* (In 50.1), the prince has brought down at least four rhinoceros while a huntsman holds the head of a lion for inspection. In the background is a pile of dead antelope. However, apart from the huntsman and mahout in the foreground, the gazes and animated gesturing of the attendants and onlookers, including the two designated *palkhi* bearers, are directed at the cheetah that has killed a blackbuck by the stream, indicative of the powerful symbolism of the motif that the artist communicates to the viewer. The image is part of a group of about eight known stylistically similar paintings were made for Prince Salim (the future Jahangir) when he established a rival court in Allahabad in revolt of his father Akbar in 1600.⁵⁴ Skelton, followed by Okada speculate that these paintings were commissioned by the prince as part of a *Shikarnama*, or hunting album, considering that Jahangir kept a complete account of all game taken until his fiftieth year.⁵⁵ The motif of the cheetah and the blackbuck is seen in all the paintings in this group. It is also seen in the marginal decorations of other paintings done for Prince Salim.⁵⁶ Although Okada notes the leitmotif's 'iconographic' status, it is interesting to note that it was first seen in *Akbarnama* paintings.⁵⁷ However, in the *Shikarnama* group of paintings it takes on a special significance. Considering Prince Salim's rebellious court set up in Allahabad, it could be perceived as a veiled message of power and defiance to Akbar.

The Gaze

The gaze was another device with which the Mughal artist organised the relationships between the figures in a painting that again involved the participation of the viewer. In the hunting painting the depiction of this gaze by the artist could be a meaningful look between the huntsmen, or even directed at the viewer, the direction of the sight lines, the subtle tilt of the head, the direction of the faces, the exchange of glances between the hunter and his prey, and the look of frozen terror on the part of the animal communicated to the viewer. The use of the gaze was first perfected by the esteemed Timurid artist Bihzad (c. 1450-1535) whose works were familiar to the Mughals. Mughal artists inherited the Persian tradition and developed and elaborated this pictorial order.⁵⁸ This ‘circuit of gazes’, to use the phrase of Grabar,⁵⁹ was meant to guide the viewer to ‘read’ the pictorial structure of the *shikargah*, the nuances of the hunt, and emphasize the figure of the imperial hunter who is the object of the composition.

Figure 6. Jahangir Showing his Hunting Skill to Karan
Attributed to Nanha
Indian Museum Kolkata R316/S.163

In Figure 6, *Jahangir Showing his Hunting Skill to Karan*, the gazes of the huntsmen and onlookers are directed at Jahangir. He is astride the largest elephant, and has just felled a large lioness with a shot directed at her eye as challenged by Prince Karan of Mewar who was in court to pay homage. In the *Jahangirnama*, Jahangir notes that he was eager to impress Karan with his marksmanship.⁶⁰ Karan touches his turban in respectful admiration of Jahangir’s feat; the onlookers are depicted in a variety of hand gestures animatedly pointing to the lioness in her death throes, or show signs of awe. Their gazes, however, remain firmly fixed on the royal hunter, save three mahouts who look down to guide the elephants. The direction of their gazes enable the viewer to follow the visual narrative of the painting whose focus is the figure of the accomplished imperial hunter. Two onlookers on the top left of the painting are also of special significance as their gazes direct the viewer to observing the topography of the *shikargah-i muqarrar* of Ana Sagar Lake, which has been depicted accurately by Nanha as rocky outcrops and hilly scrublands in the outskirts of Ajmer. However, it is the direction of Jahangir’s face and his sight line that have been intriguingly portrayed by Nanha. He seems to be looking

backwards at no one or nothing in particular. A viewer could interpret it as his nonchalance or even arrogance, showing off the success of what was a near-impossible task especially given the stormy conditions of the time which made his mount increasingly restless.⁶¹ This may be the case as Das observes that Jahangir is the only one carrying a weapon in the painting, as the incident was a hunting party organised for the demonstration of the emperor's skill, and others were only expected to witness it.⁶² But in the *Jahangirnama*, Jahangir confides his vulnerability: 'God in His Grace did not shame me before the raja's son'.⁶³ Whatever its interpretation by the viewer, the artist has successfully engaged him to become involved in the iconic space of the *shikargah* and its political implications of power.

Ancient Persian – Timurid Legacy

As mentioned earlier, Mughal sovereign ideology was grounded in the cultural memory of their successful forebears, the Timurids, and this legacy remained a legitimising characteristic of their rule thus justifying their power. Although the Mughal court included a composite nobility comprising Rajput and other Indian nobles, Iranians and Central Asians, Mughal emperors continued to refer to their Timurid patrimony and vision of kingship, particularly the *Tura-i Chingizi*, a set of Chingisid-Timurid regulations and hunting codes.⁶⁴ Mughal artists relied on experience, inherited traditions and their own intuitive understanding of the unique circumstances to create a set of recognisable devices with which they could demonstrate affiliation to the Mughals' Timurid genealogy and cultural institutions. These symbols, which also included ensigns such as the Timurid '*alams* and discussed earlier, were invariably placed in the iconic space of the *shikargah* in hunting paintings. Other artistic devices include the treatment of certain features of the landscape such as rocks, conflating the Timurid past with contemporary Mughal time, and portrayal of Persian mythical hunter-heroes as Mughal emperors.

i. Rocks

The schematic depiction of certain features of the physical environment of the landscape to define the mood and content of a scene are characteristic features of Persian art. The technique has ancient origins and continued to evolve over the centuries.⁶⁵ By the end of

the 14th century the schema to illustrate the Persian rock was set. Clusters of rounded rock forms in a heavy outline are coloured in semi-transparent areas with a darker shade in the base; its texture resembles a leopard skin pattern. In the Timurid period, the textures were modified to produce parallel brush strokes, while the clusters of the earlier period appear sharpened and the shading is more refined.⁶⁶ These techniques were inherited by the Safavid artists who emigrated with Humayun to the Mughal atelier. Brend notes that the depiction of rocks by the Persian painter ‘frees itself from the ties of realism and becomes a resource which the painter may use with great liberty to emphasise a point in his narration.’⁶⁷ Often painted with oneiric aesthetics, these surreal and fantastical rock elements painted in incandescent jewelled colours were intended to evoke the emotions of the narrative and hence suggestive of hidden meanings as seen in the *Court of Gayumarth*, painted by Sultan Muhammad in Shah Tahmasp’s *Shahnama*. These rock formations were first introduced and incorporated into Akbari painting by ‘Abd al-Samad. However, as Gonzalez notes, the subliminal patterns of the earlier period were stifled and tamed to transform the landscape into a ‘more stable and earthly ground’ that likely better suited the rational Mughal pictorial conceptions, without giving up the ‘visual lyricism of the late-Timurid/Safavid aesthetic’.⁶⁸ Given the Mughal priority over naturalistic depictions of landscape elements, it is interesting that artists continued to use schematised rock shapes albeit subtly altered from the Timurid prototype by softer shading and bold outlines. In Figure 5, the erupting, towering and sinuous rock shapes are juxtaposed by a realistically rendered tree in the same composition. Even the more illusionistic Shahjahani landscapes continued to use the rock formation as a ‘deliberate retrospective Persian allusion’⁶⁹ to highlight the message of the painting. In hunting paintings this has great significance given that several aspects and techniques of the Mughal hunting culture are derived from Timurid traditions.

Figure 7. Prince Khurram Attacking a Lion
Balchand
Windsor *Padshahnama*, RCIN 1005025.ae

In Figure 7, *Prince Khurram Attacking a Lion* in the *Windsor Padshahnama*, Balchand has deliberately evoked a Persian landscape creating a vertical plane by tilting the terrain upwards with rocky formations. Koch suggests that this setting symbolically links the

significance of the lion hunt in ancient Persian traditions.⁷⁰ However, Balchand strikes a subtle balance with an allusion to the continuity of the inherited Timurid artistic traditions of his patrons, juxtaposed with a celebration of the Shahjahani aesthetic of naturalism seen in the treatment of lush vegetation. In doing so, Balchand communicates a cognitive viewing experience to his viewer. The use of rocks in Mughal hunting painting hence seem to allude to a deeper significance: an allegiance to their Timurid ancestry but on their own terms and identity.

ii. Conflating the Timurid past with Mughal present

Anachronistic narratives are another device, both literary and artistic, to link Mughal present to their prestigious Timurid genealogy. Abu'l Fazl frequently used the power of the Timurid dynastic claims to legitimise and mobilise contemporary Mughal political aims.⁷¹ The implication here is that memorable events 'recur on the basis of an ideal time existing parallel to and outside of the time of history.'⁷² In its visual expression, different time frames converge or are superimposed into one conceptual experience in the present.⁷³ Hence illustrated genealogical scrolls, *silsilahnamahs*, portray Timur alongside the Mughal emperors as an all-embracing celebration of their dynastic legacy.

Figure 8.
Left: *Shah Jahan Riding with Dara Shikoh* V&A IM 18-1925
Right: *Timur Riding with Attendant* Chester Beatty In 07A.3
Govardhan, c.1638
Minto Album

In Figure 8, two landscape paintings from the Minto Album by Govardhan from Shahjahan's atelier are of particular significance as they indicate how the artist linked past time with the present in his depiction of the *shikargah*. *Shah Jahan Riding with Dara Shikoh* and *Timur Riding with an Attendant*, painted in 1638 were designed to face each other in a mirror reflection. The figural and spatial organisation in both paintings communicates the convergence of past time with the present. Govardhan has also used contrasting painting styles, techniques and imagery to further articulate the anachronistic narrative. He has intentionally used a 'visibly archaic style' based on Timurid pictorial models for *Timur Riding with Attendant*.⁷⁴ It features a classical Timurid landscape made up of stylised rocky elements that feature the 'leopard skin' patterns in earthy hues with

blueish shading behind which are seen stylised trees. A bearded Timur is seen in helmet and armour perhaps to signify the warrior-hunter connotations. The depiction of the horse is rendered in a highly stylised linear aesthetic with emphasis on line, balance and clarity and no emphasis on naturalism. It has an exaggeratedly long body indicative of the Timurid Shiraz shape. By contrast, the faces and clothing of Shahjahan and Dara-Shikoh show effects of more illusionistic modelling, while the landscape, rocks, trees and shrubs, and horses have been depicted with more naturalism, a characteristic feature of paintings in Shahjahani style. Both emperors are shown with the *chatr* umbrella, an ancient symbol of kingship. The stream in the foreground links the two paintings visually. By employing powerful and recurring visual metaphors in the iconic space of the landscape and the actors who participate in the imaginary scene, Govardhan's paintings invite the viewer to invoke and experience the nostalgia and cultural memory of the Timurids, and importantly, the continuity of its artistic legacy.

iii. Expression of Power through Legendary Persian Hunters

Timurid vision of kingship, from which the Mughals claimed descent, was inspired by ancient Persian as well as Turco-Mongol ideologies. The expression of power and authority through hunting was a critical part of this dynastic identity. Legendary mythical Achaemenid and Sassanian warrior-hunters such as Bahram Gur, Faridun and Cyrus are frequently referred to in Mughal texts and emulated by the emperors as ideal kings and hunters. Interestingly, the Achaemenid *pairidaeza* of Cyrus the Great (r.559-30 BCE) at Pasargadae, Iran, was the inspiration for the hunting grounds and gardens of the Timurids and Mughals.⁷⁵ Kanbo, one of Shahjahan's historians, for instance, praised him as *Khusraw shirgir* or 'lion-capturing Khusraw' in the *Amal-i Salih*.⁷⁶ The Mughal artist, well aware of the role of the visual in communicating the text and its meaning, sometimes painted a legendary king in the likeness of the Mughal emperor as a 'time-honoured visual conceit' to flatter his patron.⁷⁷

Figure 9. Faridun and the Gazelle
Painted by Mukund
India, Mughal, 1595
From a *Khamisa* of Nizami
© The British Library Board, Or. 12208, f. 19a

In Figure 9, *Faridun and the Gazelle* from the British Library's *Khamsa* of Nizami made for Akbar, the artist Mukund portrays the Persian king Faridun who is pursuing antelopes on horseback in the guise of Akbar. Mukund has also deliberately used archaizing late-Timurid-Safavid imagery to portray the *shikargah* comprising fantastically erupting rock forms in order to depict a mythical setting in the distant past. He also updates the classical Timurid landscape by portraying the large chinar tree in the naturalistic style favoured in the Shahjahani atelier.⁷⁸ To inform his viewers of the Mughals' claim to kingship grounded in ancient Persian dynasties, Mukund has subtly manipulated the content of historical texts for greater impact and laudatory purposes. As Minissale notes: 'The Mughals had recreated Persian civilisation in their own image.'⁷⁹ Mukund's use of motifs, themes and artistic techniques were thus intended to induce a thoughtful and active response from the viewer.

Spiritual Concerns in Hunting

Abu'l Fazl, long considered the architect of the Mughal vision of kingship and nationhood, intentionally manipulated the spiritual medium for the realisation of political ambitions and consolidation of the Indian polity. This resulted in cloaking political, social and cultural institutions in a spiritual garb. The imperial hunt and its visual depiction were hence seen as devotional practices undertaken by Akbar. He was seen as a paragon of physical and moral perfection endowed with virtuous qualities such as wisdom, courage and equity as set out in *ishraqi* theories and other Sufi writings, and *akhlaq* ethical texts, such as the *Akhlaq-i Nasiri* and *Akhlaq-i Jalali*. Abu'l Fazl's image of Akbar is that of the *insan-i kamil* whose kingship is divinely sanctioned: his rulership is a radiance (*faruqh*) emanating from God, a divine light (*farr-i izidi*), a sublime halo (*kiyan khura*).⁸⁰ While Akbar's artists used mood, scale and placement devices to suggest his illumined position in hunting paintings, Jahangir's and particularly Shahjahan's artists, translated the *ishraqi* light imagery in concrete form by depicting the emperor wearing a halo of light to indicate his semi-divine status.⁸¹

Abu'l Fazl also suggests that Akbar as the *insan-i kamil* is endowed with influence over outward form (*surat*) and inner meaning (*ma'na*), the esoteric (*batin*) and the exoteric (*zahir*).⁸² The duality of existence of the world of inner significances and

esoteric meanings alongside the exoteric hence permeated all walks of Mughal life, including painting and hunting. Abu'l Fazl frequently notes Akbar's exceptional insight in his appreciation of the visual aesthetic, his claim that painting was a source of divine wisdom, and the spiritual and devotional attributes of the painter who transforms objects into works of celestial beauty.⁸³ Akbar also seems to have been blessed with a singular talent whose 'magical' glance (*ikhsir-i binish*) could metamorphose a painting from outer form to inner meaning.⁸⁴ This implies the existence of the 'idea' of a Mughal painting having a *batin* and a *zahir*. These notions were commonplace in the Persianate world as seen in the writings of the Sadiqi Bek in his painting treatise *Qanun al-suwar*, which draws a distinction between a painting's *surat* implying its 'appearance', and *ma'na*, 'its true reality'.⁸⁵ Sadiqi Bek also notes of the inner senses employed by his master, the acclaimed Safavid painter Muzzafar Ali in the *Qanun*: 'When minded to portray a certain person (*timsal-i kasi*), his creative imagination (*khayal*) could penetrate to the inner man beneath.'⁸⁶ Similar sentiments were noted by other medieval Persian painters Nizami and Dust Muhammad, who describe the inner senses such as memory, imagination and cognition of the artist which made picture-making an intellectual activity.⁸⁷ Necipoğlu also notes the close connection between sight and insight, and the creative imagination of the medieval Muslim artist nurtured by the inner (spiritual) senses that complement the outer (corporeal) senses.⁸⁸ The Mughal artist was tasked with reflecting these metaphysical concerns in the depiction of the imperial hunt.

Mughal texts frequently draw parallels with hunting and spirituality, with imperial hunts often referred to as 'devotional hunting'. Abu'l Fazl notes of Akbar's cheetah hunts: 'The lord of the world, though under various forms he appears to be enjoying himself, is in reality carrying on the worship of God. He both tests men and discovers the secrets of the kingdom. With this view he makes hunting a means of gaining knowledge, and employs himself in real devotion'.⁸⁹ Hunting enabled the emperor to be in close touch with his people and to be a just and equitable ruler, the noblest of virtues set out in ethical texts. The image of the emperor as a brave warrior-hunter who had a moral obligation to subdue wild nature in order to protect his people thus became a central tenet through which authority and public persona were projected. Scholars such as O'Hanlon and Juneja have analysed Abu'l Fazl's reading of *akhlaqi* texts to define Akbar's political

authority in bodily terms and note the importance of the visual in communicating these notions that include the image of the emperor as a hunter.⁹⁰ Figure 1 contains a reference to 'adl or justice as Hamid Bakari is seen punished and humiliated in the *shikargah*. In Figure 9 Mukund contrasts the subject of an imperial hunt with labourers working in the fields to express the reality of the emperor completely attuned to the conditions of his people. The wide circulation of *akhlaqi* texts,⁹¹ the broad appeal and influence of Sufi orders that were well-organised and engaged in brisk spiritual activity,⁹² and the image projected for Akbar as the spiritual guide of his people⁹³ meant that subjects were receptive to multiple responses to both the act of the hunt and its visual depiction.

O'Hanlon rightly notes that it was during hunting that the emperor appeared in closest communion with the landscapes of his empire.⁹⁴ 'A ruler whose authority was recognised both men and animals could extend his power to the realm and conscience ... Men, Animal and Conscience completed the circle of Akbar's authority'.⁹⁵ In the depiction of the *shikargah* the artist is thus able to communicate the emperor's relationship and authority over the ecology, the animal world and his subjects. In Fig 3, Basawan has negotiated the iconographic choices available at the *kitabkhana* and the textual descriptions of the particular hunt at Narwar to depict Akbar at the centre of an action-filled tiger hunt, described earlier, which becomes the outward form of the painting; its inner meaning, however, is the struggle and domestication of the hostile forces of nature that had to be subdued by the emperor for the balance and harmony of his subjects and hence seen as a metaphor for 'adl.

Hunting expeditions which often took the emperor and his court to distant parts of the empire were also occasions to meet and discuss spiritual matters with wandering ascetics, Yogis and Sufis of various religious orders, and visit Sufi shrines. In 1578, when Akbar was 'spiritually hungered in the struggles of search [of religious knowledge]'⁹⁶ an intense spiritual experience came over him in the Bhera *shikargah*, just before an elaborate *qamargha* could commence. Court historians variously described it as an inner illumination of divine light, a 'sublime joy' taking possession of his bodily frame, and 'the attraction (*jazaba*) of cognition of God casting its ray on him.'⁹⁷ The hunt was abruptly cancelled.

Figure 10. Akbar Ordering the Slaughter to Cease in 1578
Attributed to Miskina
Johnson Album 8,4
© The British Library Board

The experience is visually articulated in Figure 10, *Akbar Ordering the Slaughter to Cease* by the artist (attributed to Miskina), who is tasked with suggesting to the viewer a link between the hunting landscape and spiritual concerns. Miskina has portrayed Akbar in a moment of spiritual enlightenment in the middle of a *shikargah* in a symbolic compositional schema at the centre of a solar assemblage with ‘rays’ radiating from his person to suggest his status as the *farr-izidi*, from whom divine light emanates. This artistic devise is enabled by the depiction of the *shikargah* in a semi-circular formation of concerned and bewildered huntsmen and courtiers expressing gestures of wonder, and a corresponding semi-circle of erupting rock formations interspersed with markhor and other animals of the Bhera region. Although textual references indicate the cancellation of the *qamargha* and the freeing of game unharmed, Miskina has taken the liberty to indicate to the viewer what might have been by depicting the body of a *bharal*, (Himalayan blue sheep) directly in front of Akbar’s gaze. By placing Akbar under a solitary tree, Miskina further evokes Buddhist traditions of enlightenment.⁹⁸ It is clear that Miskina was keen for his viewer to understand that the mundane activity of the hunt when enacted by the *insan-i kamil* took on other worldly sensibilities that was capable of engendering spirituality.

Conclusion

The Mughal artist tasked with depicting a hunting landscape had to negotiate a wide range of strategies, visual hermeneutics, communicative devices and symbols in order to offer his viewers a multitude of meanings, through an aesthetic gazing experience, to enable them to appreciate the ideological concerns underlying his depiction of the *shikargah*. As the illustration of the particular hunt took place several years after the event and its textual references, it is important to note that the hunting landscape an artist portrays is his *interpretation* of events, his imaginative experience of what his mind eye observes, and his visual expression of how he understands the Mughal hunting paradigm. While he relies on the traditional stock of styles, experience, techniques and visual metaphors that are available in the Mughal atelier, his viewer has to take into

consideration the significant part his internal senses, such as memory, imagination and insight, play in the production of the hunting landscape. These cognitive responses on the part of the artist are no doubt galvanised by the prevalent ideas of a Mughal painting having a *surat* and a *ma'na*. The fact that painting was considered an intellectual activity is what propelled the Mughal artist to occasionally manipulate the content of written texts to elicit an impactful response from the viewer.

In the main, art historians have portrayed the Mughal painter as possessing limited artistic and aesthetic capabilities because he was bound by courtly artistic conventions and the dictates of his imperial patron who asserted control over the production.⁹⁹ This not only underestimates the artists' active role in the creative process, but also diminishes the considerable freedom he had in the selection of descriptive details related to the main event, and in the selection of the passage of the event.¹⁰⁰ For instance, in illustrating the event of Akbar's spiritual experience whilst hunting wild asses in Pak Pattan in 1571, the unknown artist has opted to portray Akbar engaged in the hunt, and depict a rocky desert *shikargah* surrounded by huntsmen and prey, which corresponds to the first part of the event and is illustrated in the *Tarikh-i Khandan-i Timuriya*. The artists Mahesh and Kesav, by contrast, chose to depict the concluding phase of the same event and portray an exhausted Akbar experiencing a moment of mystical enlightenment in the *shikargah* in the V&A *Akbarnama*. Although the choices vary in the selection of the episode of the same event, both sets of artists are mindful of the fact that their task was to guide the viewer through the scenes as it unfolds in the text, using a pictorial language that was traditional and entrenched, and which they best understood. Far from being a passive bystander, the Mughal viewer was likewise expected to be an active participant in the viewing process. By ensuring that visual interest is spread over the entire pictorial composition, and by his use of mimetic and non-illusionist aesthetics in the same composition, the artist suggests a variety of viewing choices to the viewer to witness the power of the hunting image as it gradually unfolds. There are hence a multitude of ways to fathom the creative gaze of the Mughal artist as he attempts to portray the layers of meanings attached to the hunting landscape; this requires the viewing process to be a holistic experience, and an intellectual, emotional and devotional undertaking.

ENDNOTES

¹ Mitchell, 2002, 14.

² Mitchell, 2002, 8.

³ See Parpia, 2018a, 43-57; also Parpia, 2016, 175-184.

⁴ This essay has not explored the great number of Mughal natural historical visual studies of fauna due to space constraints. For a discussion of this topic see Verma, 1999b, 12-24; Verma, 1999a; Parpia, 2019.

⁵ See for instance, Beach, 1978, 1992, 1997, 2012; Brend, 1979; Das, 1967; Koch, 1997, 1996; Seyller, 2002; Rogers, 1993; Verma, 1999a, 1999b, 2009.

⁶ See for instance Divyabhanusinh, 1999; Okada, 1992b; Skelton, 1969, 1988. In particular, Ebba Koch's outstanding article is an extensive discussion of the decoy hunt and its visual depiction especially for the Shahjahani paintings. See Koch, 1998, 'Dara-Shikoh', 11-58. Ellen Smart also offers fresh discussions on the decoy hunt depicted by the artist Payag. See Smart, 1979, 'Mughal Hunting Picture by Payag', 396-400.

⁷ Minissale, 2006a, *Images of Thought*.

⁸ Verma, 1997, 149.

⁹ Beach, 2012, 9.

¹⁰ Verma, 1999a, 35. See also Verma, 2009, 10-20.

¹¹ Abu'l Fazl, *A'in*, vol.1, 113-4.

¹² Gonzalez, 2015, 204.

¹³ Sadiqi Bek, cited in Dickson and Welch, 1981, vol.1, 264-65. Sadiqi Bek Afshar was a Safavid painter-poet-librarian in Shah Tahmasp's court, who has also provided much insight on Safavid artists such as Dust-Muhammad, Mir Sayyid Ali and Abd as Samad who later travelled to the Mughal court with Emperor Humayun and set up the Mughal painting atelier. It is likely that their styles of painting followed the ideals set out in the *Qanun*.

¹⁴ Porter, 2000, 112.

¹⁵ Minissale, 2006a, 9. In the main, art historical discourses on Mughal painting, often otherwise outstanding, have been clouded by assumptions that it hinged on, and remained overwhelmingly indebted to 'superior' European art techniques such as shading, modelling and perspective, and that Mughal artists had only limited success in achieving the correct perspective compared to European techniques. See for instance Das, 1978, 242; Rogers, 1993, 56; While it is true that the Mughals did adopt some European artistic techniques for depicting realism, Minissale notes that this was seen as a 'culmination and refinement of earlier artistic objectives and desires', adding 'this adoption represents the negotiation of cultural identities rather than a natural or merely technological progression to more refined methods of artistic representation'. See Minissale, 2006a, 14.

¹⁶ Abu'l Fazl, *Akbarnama*, vol.1, 15.

¹⁷ Parpia, 2018a.

¹⁸ Necipoğlu, 1995, 219.

¹⁹ Koch, 1998, 31.

²⁰ Abu'l Fazl, *Akbarnama*, vol.2, 416.

²¹ Juneja, 2011, 242.

²² For a discussion of the fauna of the Salt Range see Divyabhanusinh, 1999, 103-06.

²³ Parpia, 2018a, 46.

²⁴ Koch, 1998, 31-33.

²⁵ Koch, 1998, 33.

²⁶ Smart, 1979, 396.

²⁷ Minissale, 2006a, 72. See also Hardy, 1985, 115.

²⁸ Abu'l Fazl, *A'in*, vol.1, 293.

²⁹ 'Landscape Painting' in *Oxford Companion to Art*, cited in Mitchell, 2002, 12-13.

³⁰ Minissale, 2006a, 105.

³¹ Asher, 2004, 175.

³² O'Hanlon, 2007, 892, 898.

³³ Abu'l Fazl, *Akbarnama*, vol.2, 222-3.

³⁴ Abu'l Fazl, *A'in*, vol.1, 113-4.

³⁵ Koch, 1998, 31.

³⁶ Richards, 1998, 294.

- ³⁷ Abu'l Fazl, *A'in*, vol.1, 52. He mentions the following visual signifiers: the *awrang* (throne), *chatr* (umbrella), *sayaban* (fan), *kawkaba* (a sphere), the *'alam* (standard) and flags
- ³⁸ Abu'l Fazl, *A'in*, vol.1, 293.
- ³⁹ Abu'l Fazl, *A'in*, vol.1, 52.
- ⁴⁰ Verma, 1976, 41.
- ⁴¹ See Parpia, 2016, 187. For details of Peter Mundy's account of Shahjahan's grand procession into Agra from the Dahra Bagh hunting garden in June 1632, see Mundy, *Travels*, vol.2, 192-4.
- ⁴² Beach and Koch, 1997, 194.
- ⁴³ For details of the *qur* see Abu'l Fazl, *A'in*, vol.1, 52, 115-16.
- ⁴⁴ Beach and Koch, 1997, 194-5. Koch is referring to Kanbo, *'Amal-i Salih*, vol.3, 18.
- ⁴⁵ See for instance Koch, 1997, 138. See also Beach, 1992, 54.
- ⁴⁶ Koch, 1997, 138.
- ⁴⁷ Beach, 1992, 20. For details of this particular hunt see Abu'l Fazl, *Akbarnama*, vol.1, 634.
- ⁴⁸ Beach, 1992, 31.
- ⁴⁹ Published: Seyller, 2002, 271 and 276, (R 114 MAK – BI 8770/51); (R 161V&A IS 7-1949).
- ⁵⁰ Parpia, 2016, 179; Bernier, 1934, 375.
- ⁵¹ Abu'l Fazl, *Akbarnama*, vol.2, 343, 368-69.
- ⁵² Abu'l Fazl, *A'in*, vol.1, 296-301.
- ⁵³ Abu'l Fazl, *Akbarnama*, vol.2, 218-19.
- ⁵⁴ For details about Prince Salim's albums made in the Allahabad court see Beach, 1978, 43-53.
- ⁵⁵ Jahangir, *Tuzuk*, vol.1, 369. See Skelton, 1988, 43-45; Okada, 1992b, 320. See also Divyabhanusinh, 1999, 106-7.
- ⁵⁶ See for instance the painting titled *A Buffalo Fighting a Lioness* c.1595-1600, attributed to Farrukh, now in the Nelson Gallery, Kansas City, 48.12/2.
- ⁵⁷ For instance, V&A IS 2:1896-93 and IS 2:1896-56/55. Okada, 1992a, 321.
- ⁵⁸ Minissale, 2006b, 50, 52. Minissale's article analyses several types of gazes usually related to the social hierarchy; I have discussed only those that relate to hunting paintings.
- ⁵⁹ Grabar, 1999, 133.
- ⁶⁰ Jahangir, *Jahangirnama*, 174.
- ⁶¹ Jahangir, *Jahangirnama*, 174.
- ⁶² Das, 1967, 22.
- ⁶³ Jahangir, *Jahangirnama*, 174.
- ⁶⁴ For discussion of the Mughals' Timurid legacy see Parpia, 2018a, 41-43; Balabanlilar, 2007; Ali, 1994, 99-101.
- ⁶⁵ Soucek, 1979, 88.
- ⁶⁶ Brend, 1979, 114-115.
- ⁶⁷ Brend, 1979, 117.
- ⁶⁸ Gonzalez, 2015, 205-6.
- ⁶⁹ Koch, 1997, 140.
- ⁷⁰ Beach and Koch, 1997, 188. For a discussion of Mughal lion hunts see Skelton, 1969 and Divyabhanusinh, 2005, 89-113.
- ⁷¹ Balabanlilar, 2007, 5.
- ⁷² Minissale, 2006a, 152-3.
- ⁷³ Minissale, 2006a, 153.
- ⁷⁴ Okada, 1992a, 193.
- ⁷⁵ For discussion of Achaemenid *pairidaezas*, see Parpia, 2016, 172-3; Parpia, 2018a, 41-43. See also Allsen, 2006, 34-35.
- ⁷⁶ Cited in Beach and Koch, 1997, 188.
- ⁷⁷ Seyller, 2002, 59.
- ⁷⁸ See also Koch, 1996, 171.
- ⁷⁹ Minissale, 2006a, 148.
- ⁸⁰ Abu'l Fazl, *A'in*, vol.1, 3.
- ⁸¹ Asher, 2004, 179-180.
- ⁸² Abu'l Fazl, *Akbarnama*, vol.1, 15.
- ⁸³ Abu'l Fazl, *A'in*, vol.1, 114-5.

- ⁸⁴ Abu'l Fazl, *A'in*, vol.1, 114. The reference here is to the works of Abd al-Samad.
- ⁸⁵ Sadiqi Bek, cited in Dickson and Welch, 1981, I, 259-269.
- ⁸⁶ Sadiqi Bek cited in Dickson and Welch, 1981, I, 261.
- ⁸⁷ Soucek, 1972, 9-21.
- ⁸⁸ Necipoğlu, 2015, 30-31. See also Necipoğlu, 1995, 198-206 for a detailed description on the role of the internal senses in painting.
- ⁸⁹ Abu'l Fazl, *Akbarnama*, vol.2, 508-9.
- ⁹⁰ O'Hanlon, 2007; Juneja, 2011.
- ⁹¹ According to Akbar's *Dasturu'l-'amal* which was a circular widely distributed to civil servants of all ranks, ethical books, in particular *Akhlaq-i Nasiri* was essential reading. See *Mukatabat-i 'Allami*, 79.
- ⁹² Nizami, 1989, 91-93.
- ⁹³ Abu'l Fazl, *A'in*, vol.1, 173. Abu'l Fazl describes at length of the multitudes of people that sought out justice, and spiritual guidance from Akbar during hunting expeditions.
- ⁹⁴ O'Hanlon, 2007, 898, 902.
- ⁹⁵ Nizami, 1989, 185.
- ⁹⁶ Abu'l Fazl, *Akbarnama*, vol.3, 345.
- ⁹⁷ See Badaoni, *Muntakhabu-t-Tawarikh*, vol.2, 261; Abu'l Fazl, *Akbarnama*, vol.3, 346-7.
- ⁹⁸ A likely reference to the Buddha attaining enlightenment under a bodhi tree.
- ⁹⁹ See for instance Koch, 1997, 131.
- ¹⁰⁰ Verma, 1997, 156.

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CONCLUSION

In his book *Changes in the Land: Indians, Colonists, and the Ecology of New England*, environment historian William Cronon made the following observation: ‘Environment may initially shape the range of choices available to a people at a given moment, but the culture reshapes environment in responding to those choices. The reshaped environment presents a new set of possibilities for cultural reproduction thus setting up a new cycle of mutual determination’.¹ Although Cronon is referring to New England landscapes transformed by indigenous Indians and Colonists, there is a ring of relevance to India’s environmental landscapes during the rule of the Great Mughals. His observation applies to how the Mughal society arranged and rearranged contested spaces in fundamental ways to give new meanings to the domain of the royal hunting ground, wilderness, pasture lands and agrarian spaces as humans and animals jostled and competed for precious resources. What has emerged from this study is that the Mughal hunting culture in general and the topography of the *shikargah* in particular have been instrumental in seeking to redefine the physical, as well as the cultural, political, social and spiritual environment of the Indian subcontinent. Well aware that there was a constant shifting of boundaries between the wild and the cultivated, human and animal, the Mughals sought to reimagine the environment that took into account their relationship with the various actors involved and other contingent factors. These include the interactions between the human protagonists, such as the royals and their extensive hunting apparatus that consisted of various personnel directly and indirectly involved in the hunt, domesticated and tamed antelopes for use as decoys, and captured and trained cheetahs and elephants. It also included a dynamic relationship with farmers, pastoralists and peasants. Other players in the equation included the agrarian environment and its perceived integration with the forests and cultivated lands; and animals and humans who constantly encroached on each others’ domains.

The vast Mughal empire was naturally endowed with divergent environments, such as dense tree forests, scrublands, deserts and alluvial riverine flood plains. However,

¹ Cronon, William. 2003. *Changes in the Land: Indians, Colonists, and the Ecology of New England*, 1st rev. ed., New York: Hill and Wang, 13.

the existence of a complex web of factors involving attitudes, politics, culture, society, hunting practices and economics played a large part in the outcomes of how these environments were finally altered and utilised. The Mughal society was essentially agrarian, and the state received a bulk of its revenue from the agricultural sector. However, as the historian Shireen Moosvi indicates, at the end of the sixteenth century the area of gross cultivation in Akbar's empire was approximately half of what it was at the beginning of the 1900s.² This is indicative of the fact that the extent of uncultivated or forested terrains was considerable. Naturally, the forest was the contested space *par excellence* whose territory was constantly encroached for deforestation by mutually contradicting socio-economic systems such as the imperial hunting institution, the agrarian sector and the pastoral sector. Remarkably, however, it was not always the ruling elite who had the wherewithal to transform the natural environment for economic, cultural or social reasons. Neither did they enjoy a monopoly over its natural resources. Autonomous local chieftains who ruled over often impenetrable but not totally isolated jungles in mountainous regions used the geography and physical environment of their regions to indulge in mixed economies comprising semi-agrarian, pastoral and forestry. These lands often bordering cultivated swathes were the real contested spaces. The attitudes towards these spaces by the state was ambivalent:

1. The cultivated lands within the predominantly agricultural Mughal state included swidden, long fallow in dry lands that were previously scrub, and permanent tillage of well-irrigated rain-fed lands. Hence pastoral and forested areas were naturally seen as a threat to the agricultural economy and there was constant state-sponsored encroachment into these lands.
2. However, these spaces were also abundant with game for the chase and ideally suitable for turning into hunting grounds, which they sought to reshape by the addition of architecture, deforestation/reforestation depending on the hunting technique, and water bodies. Cronon's words that 'the reshaped environment presents a new set of possibilities for cultural reproduction'³ has much relevance to the reshaped Mughal *shikargah* which ultimately became the stage for

² Moosvi, 1987, 66.

³ Cronon, 2003, 13.

multifarious political and social functions, and war machinery. Importantly, new possibilities linked the hunting ground to garden spaces in the manner of their illustrious Timurid forebears, and seen as the scene for spiritual revelations, and scientific forays.

3. Another alternative was to turn it over to pasture as it was a very important resource for the peasantry. *Peshkash*, or tribute, from the local chieftains often comprised of valuable forest produce or pastoral products such as wild cattle and elephants.

What is unreservedly articulated is the existence of different sets of players in the social organisation within the confines of the empire who each sought to place their own distinctive imprint on the environment often in mutually contradicting ways. Hence the same physical environment had different emphasis in utility and meaning to various groups in the field. These overlapped, intersected, and were often conflictual, but the Mughals and their agents responded to the diversity. The Mughals were also well aware that the physical, social and agro-environmental borders were fluid and constantly shifted. And their social and economic machinery allowed for these spaces to lapse back to their original environments. Military expansions masquerading as hunting expeditions, and the policy of increased cultivation brought the Mughal state into even closer contact with pastoral and forest societies that lived in the periphery of agricultural lands.⁴ In his ideal world view the emperor pictured himself as striking a perfect balance between imperial hunting activities which served to manage and subdue nature, and his nurturing role as protector of agriculture and the environment. Greatly influenced by the traditional ethics *akhlaqi* texts, the Mughals, in large part, were able to maintain a respectful and mutually interdependent relationship with animals and the environment.

The Mughal hunting culture was never an indiscriminatory tradition of killing wild animals. It was selective, and undertaken to fulfill a number of symbolic and socio-political obligations.⁵ It had much to do with man's behaviour towards animals and

⁴ Singh, C., 1995, 48.

⁵ As a general rule, Mughals refrained from killing the female big cat; and emperors and his favoured relatives alone had the prerogative to hunt the lion as it was considered royal game. According to Divyabhanusinh, the Mughal hunt was largely confined to the scrub forests and savannahs (the habitat of

marginal groups such as the pastoralists and forest dwellers. This aspect engages with Cronon's observations that 'the reshaped environment presents a new set of possibilities for cultural reproduction thus setting up a new cycle of mutual determination'.⁶ One of the key aspects of the Mughal institution of the hunt was the interaction with the marginal groups which the system actively encouraged. Pastoral communities have always lived in proximity to animal habitats and hunting grounds, and indeed was one of the defining features of the *shikargah*. While historical memory reminds us that this relationship was often aggressive and conflictual, the fact remains that the Mughal state, the hunting institution, and the agrarian sector benefitted from the interaction with pastoral societies, just as the latter came to play a more important role in its economic and political forefront. It is this feature that needs to be taken on board by the official wildlife conservation establishment in present-day India.

The passing of the Wildlife (Protection) Act in 1972 has helped conserve a significant part of India's biodiversity; but it has also engendered severe conflicts between local communities who are dependent on forest resources and Protected Area (PA) managers, a strategy which according to Asish Kothari alienates and is unjust to local communities, and is a short-sighted plan for wildlife conservation.⁷ The PA management, largely comprised of political environmentalists, has been driven by the belief that the only solution to saving big game is the creation of National Parks that are human-free zones and with little or no interaction with its local population, traditionally

the Asiatic lion) that typically lay in the travel paths of the imperial entourage. This could be the reason that the tiger, whose preferred habitat is deep inside thick impenetrable jungles, is hardly mentioned in Mughal chronicles. See Divyabhanusinh. 2014. 'Lions, Cheetahs, and Others in the Mughal Landscape' in *Shifting Ground: People, Animals, and Mobility in India's Environmental History*, Mahesh Rangarajan and K Sivaramakrishnan (eds.), New Delhi: Oxford University Press, 90.

Jahangir notes in his extensive list of animals taken during a span of 39 years that he shot a total of 86 lions. See Jahangir, *Tuzuk*, vol.1, 369. This could be seen as a relatively low number considering the exploits of the British outlined below.

Divyabhanusinh opines that during the time of the Great Mughals, there seems to have been no indication that there was any cause for concern regarding the decline in lion populations. See Divyabhanusinh, 2014, 92. However, the indubitable 'distinction' of virtually exterminating the lion population goes to the officers of the British Raj together with the Maharajas of princely kingdoms in the 1800s. For instance, a Colonel George Acland Smith killed more than 300 lions in the 1850s while the Raja Bishan Singh of Bundi shot more than 100 in the 1840s, besides numerous tigers. See Divyabhanusinh, 2005, 122-123.

⁶ Cronon, 2003, 13.

⁷ Kothari, Asish. 1996. 'Is Joint Management of Protected Areas Desirable and Possible?' in *People and Protected Areas: Towards Participatory Conservation in India*, Asish Kothari et al (eds.), New Delhi and London: Sage Publications, 18.

considered the custodians of environment and the fauna. Local communities in these zones have hence been evicted, often forcibly, to resettlement sites.⁸ As Valmik Thapar, a renowned conservationist and member of the Tiger Task Force comments: ‘The premise that there are vast areas of India where tigers and people must be forced to co-exist through some innovative scheme of increased use of underutilized forest resources by involving local people does not make any sense to tiger conservation’.⁹ He also notes, ‘tigers and human beings cannot share the same tract of forest’.¹⁰ Recent debates about the follies of exclusivist and elitist ideas that involve displacement of villagers and denying them access to forest resources have brought to light some of the failures of the conservation establishment. It has also highlighted the real reason for the dwindling big cat populations, namely, degradation of the forest, and the alienation of the local people from the fauna conservation cause.

However, those conservation projects, few they may be, that have involved the local populations have been true success stories. A case in point is the Asiatic lion. The Gir forest in Gujerat is its last remaining habitat. Gir also contains over 30 species of mammals such as wild boar, nilgai and chital, seen as typical prey for the lion. The area around the PA comprises protected forest, wastelands, grazing lands and cultivated lands, all intensively managed urban and rural landscapes.¹¹ It has also been the home of cattle breeding communities such as the Maldharis who have a wealth of knowledge of local ecosystems. Due to their long recognition of lions as revered animals, their lifestyles are in harmony with their natural surrounds and they have a profound respect for the natural order of the forest. ‘The Working Plan of Gir Forests’ and ‘The Gir Lion Sanctuary Project’ were launched in 1975, as a result of which over 500 Maldhari families were

⁸ Narayan, Shankar. 1996. ‘Joint Management of Gir National Park’ in *People and Protected Areas: Towards Participatory Conservation in India*, Asish Kothari et al (eds.), New Delhi and London: Sage Publications, 217-18.

⁹ Thapar, Valmik. 2005 ‘Note of Dissent’ in *Joining the Dots: The Report Of The Tiger Task Force*, New Delhi: Ministry of Environment and Forests, Government of India, 164.

¹⁰ Thapar, 2000, 17. Many villages, including Anantpura, Berda, and Lakarda, were moved outside the boundaries of Ranthambhore Park in 1976-77.

¹¹ Pathak, Bharat. 1996. ‘Management Options for Gir Protected Area’ in *People and Protected Areas: Towards Participatory Conservation in India*, Asish Kothari et al (eds.), New Delhi and London: Sage Publications.

evicted from the PA in conditions that were less than satisfactory.¹² Not surprisingly most moved back after a few years thanks in large part to the state taking a sympathetic view after much lobbying by the local people, and activists. As of 1996, there were over 6000 Maldharis living inside the PA and forest settlement villages, while within a distance of six kilometres along the border of the Gir National Park there are over 152,000 people and over 94,000 heads of cattle. NGOs such as the Aga Khan Rural Support Programme (AKRSP) have been working closely with the Forest Department to initiate a joint forest management programme. Education to reduce ecological damage, restrictions on grazing of Maldhari cattle to prevent over-grazing, and inclusion of resident Maldharis in management has meant that the local population was well motivated to undertake and expand eco-development projects.¹³ The results have been remarkable. From fewer than 20 in the early 20th century, the lion population stands at a relatively healthy 600 in 2018, a steady growth rate of 2 *per cent* per year.¹⁴ As Gitanjali Bhattacharya of the Zoological Society of London notes: ‘Unlike in Africa, where too many villagers see lions, elephants, rhinos and other endangered species as competitors for scarce resources, here [Gir], people revere and protect the lions in their midst’.¹⁵ Besides the sustained efforts of the Gujarat Forest Department, the attitudes of the local Maldhari community have greatly contributed to the cause. More than 150 lions now live outside the sanctuary and range across 20,720 sq km of bush and farmlands.¹⁶ Aside from the symbolic and religious devotion, the lion is seen as the champion of their crops as it preys on nilgais, boars and deer that cause much damage to agriculture. Although the Maldharis have lost cattle and even the occasional human to the lion, they still view the lion with reverence due to their mindset that Gir is the lion’s territory and it is humans who are encroaching. Going against the preconceived mindset of official thought that most local villagers are poachers, Gir Maldharis are dedicated rangers who rescue and treat sick animals. Dr Chavinath Pandey, formerly Gujarat’s chief wildlife warden notes: ‘This is a place where

¹² Compensations to displaced Maldharis resettled in new sites were inadequate and tardy. Net incomes earned by resettled families were much less than the few Maldharis still living inside the PA. See Pathak, 1996 and Narayan, 1996. This a simplified version of the conflicts, resettlement deals, responses and other issues. These have not been covered in greater detail as it is beyond the scope of this study.

¹³ Narayan, 1996, 219.

¹⁴ ‘India’s Endangered Asiatic Lion Population Increases to 600’, AFP, March 6, 2018.

¹⁵ Cited in Martin Fletcher, ‘Saving Gir’s Lions’ in *The Straits Times*, May 1, 2016.

¹⁶ Martin Fletcher

the big cat and local people are in complete understanding with each other and, to my mind, that's the reason the lions are surviving so well.'¹⁷ The cultural landscape of Gir reshaped by the dedication and profound knowledge of local communities and forest managers thus stands to open new paths that are mutually beneficial to the lion, environment and local people.

The conservation projects of big game in India today has much to benefit from a thorough understanding of the Mughal hunting culture. Rather than being dismissive of the imperial hunting institution as a wildlife-killing mechanism, it is important to take note of the complex network of attitudes, culture, politics, economics and participation of social groups that were essential components of how the *shikargah* and its landscape were conceived and used. My work which includes the holistic way in which the Mughals integrated agricultural lands with forests, and their interaction and co-existence with non-agricultural pastoral and forest dwellers thus has a hint of relevance in contemporary Indian environmental history.

¹⁷ Cited in 'Saving Gir's Lions'.

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