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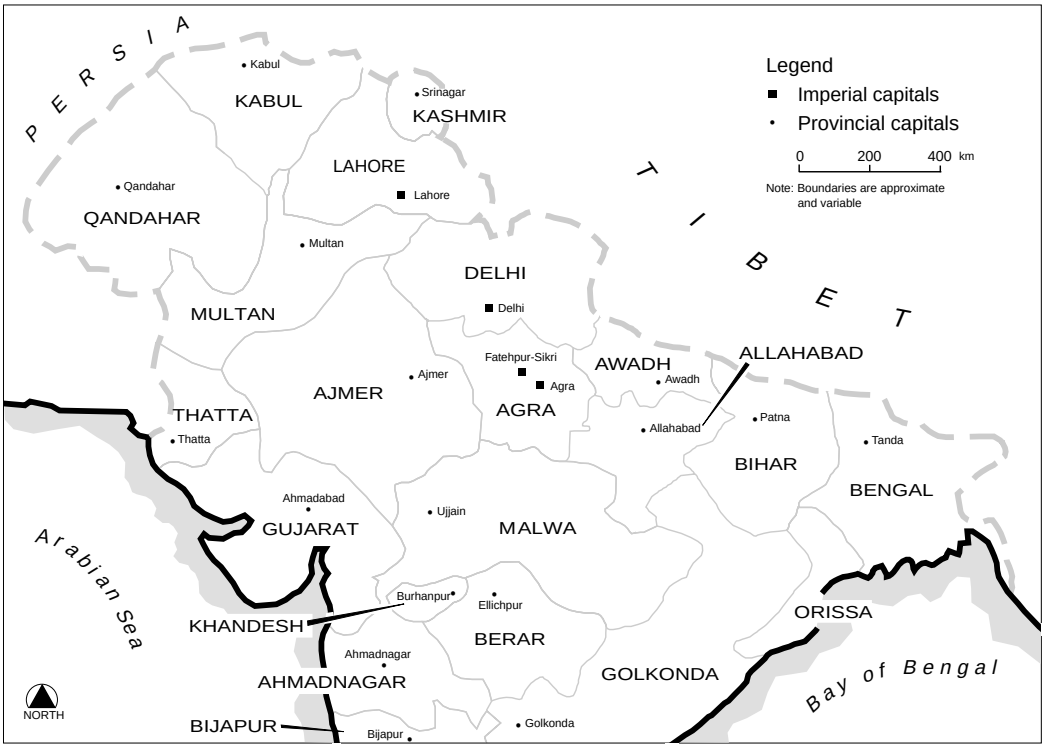
Mughal Gardens: The Re-emergence of Comparative Possibilities and the Wavering of Practical Concern

James L. Wescoat Jr.

The history of Mughal gardens, a tradition that originated in Central Asia and extended into South Asia in the sixteenth through eighteenth centuries, faces intellectual and practical challenges that bear heavily upon its future, warrant a reappraisal of its past, and have relevance for other garden traditions as well (Figs. 1, 2). This paper identifies and addresses these challenges by setting Mughal garden history in a comparative context, first by assessing developments in related fields of Islamic garden studies, and second, by appraising the place of Mughal gardens in broader fields of historical and practical inquiry.

There has been more research on Mughal gardens in the past decade than in any other period of history. Numerous articles have appeared in journals of landscape architecture, geography, and art history, as well as South Asian and Islamic studies.[1] In 1996, the Smithsonian Mughal Gardens Project yielded two volumes published by Dumbarton Oaks and Ferozsons

[1] Catherine Asher, "Babur and the Timurid Char Bagh: Use and Meaning," *Environmental Design: Journal of the Islamic Environmental Design Research Centre* (1991), 46–55; Gauvin Bailey, "The Sweet-Smelling Notebook: An Unpublished Mughal Source on Garden Design," in *Gardens in the Time of the Great Muslim Empires: Theory and Design*, supplement to *Muqarnas* 7, ed. Attilio Petruccioli, Leiden, 1997, 129–39; James Dickie (Yaqub Zaki), "The Mughal Garden: Gateway to Paradise," *Muqarnas* 3 (1986), 128–37; Ebba Koch, "The Zahara Bagh (Bagh-i Jahanara) at Agra," *Environmental Design: Journal of the Environmental Design Research Centre* (1986), 30–37; idem, "The Mughal Waterfront Garden," in *Gardens in the Time of the Great Muslim Empires*, ed. Petruccioli, 140–60; idem, "Mughal Palace Gardens from Babur to Shah Jahan," *Muqarnas* 14 (1997), 143–65; *Marg* 26, 1, (special issue, *Landscape Architecture and Gardening of the Great Mughals*); Elizabeth B. Moynihan, "The Lotus Garden Palace of Zahir al-Din Muhammad Babur," *Muqarnas* 5 (1988), 134–52; Subhash Parihar, "Some Extinct Mughal Gardens in the Punjab and Haryana," *Islamic Culture* 58 (1984), 251–54; idem, "Hadironwala Bagh, Nakodar," *Oriental Art* 39 (1993), 39–46; idem, "A Little Known Garden in India: Aam Khas Bagh, Sirhind," *Oriental Art* 31 (1985/6), 421–32; Attilio Petruccioli, ed., *Il giardino islamico: Architettura, natura, paesaggio*, Milan, 1993; idem, *Gardens in the Time of the Great Muslim Empires*; Abdul Rehman, "Garden Types in Mughal Lahore according to Early-Seventeenth-Century Written and Visual Sources," in *Gardens in the Time of the Great Muslim Empires*, ed. Petruccioli, 161–72; D. Fairchild Ruggles, "Humayun's Tomb and Garden: Typologies and Visual Order," in *Gardens in the Time of the Great Muslim Empires*, ed. Petruccioli, 173–86; Philippa Vaughan, "The Mughal Garden at Hasan Abdal: A Unique Surviving Example of a 'Manzil' Bagh," *South Asia Research* 15 (1995), 241 ff.; James L. Wescoat Jr. and Joachim Wolschke-Bulmahn, "The Mughal Gardens of Lahore: History, Geography and Conservation Issues," *Die Gartenkunst* 6 (1994), 19–33; James L.



1. The Mughal Empire and its major provinces, ca. 1590

Publishers in Pakistan.[2] These works include historiographic perspectives that trace the field from Constance Mary Villiers-Stuart's *Gardens of the Great Mughals* (1913) to the Smithsonian Mughal Gardens Project.[3] Other essays examine the historiography of Mughal garden conservation and restoration, from the early surveys of Alexander Cunningham and

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Wescoat Jr., "Mughal Gardens and Geographic Sciences, Then and Now," in *Gardens in the Time of the Great Muslim Empires*, ed. Petruccioli, 187–202; idem, "From the Gardens of the *Qur'an* to the Gardens of Lahore," *Landscape Research* 20 (1995), 19–29; idem, "The Scale(s) of Dynastic Representation: Monumental Tomb-Gardens in Mughal Lahore," *ECUMENE: Journal of Environment, Culture, and Meaning* 1 (1994), 324–48; idem, "Ritual Movement and Territoriality: A Study of Landscape Transformation during the Reign of Humayun," *Environmental Design: Journal of the Islamic Environmental Design Research Centre* (1993), 56–63; idem, "Gardens of Conquest and Transformation: Lessons from the Earliest Mughal Gardens in India," *Landscape Journal* 10, 2 (1991), 105–14; idem, "Gardens of Invention and Exile: The Precarious Context of Mughal Garden Design during the Reign of Humayun (1530–1556)," *Journal of Garden History* 10 (1990), 106–16; idem, "Picturing an Early Mughal Garden," *Asian Art* 2 (1989), 59–79; James L. Wescoat Jr., Michael Brand, and M. Naeem Mir, "The Shahdara Gardens of Lahore: Site Documentation and Spatial Analysis," *Pakistan Archaeology* 25 (1993), 333–66; and eidem, "Gardens, Roads, and Legendary Tunnels: The Underground Memory of Mughal Lahore," *Journal of Historical Geography* 17, 1 (1991), 1–17.

[2] Mahmood Hussain, Abdul Rehman, and James L. Wescoat Jr., eds., *The Mughal Garden: Interpretation, Conservation, Implications,* Lahore, 1996; James L. Wescoat Jr. and Joachim Wolschke-Bulmahn, eds., *Mughal Gardens: Sources, Places, Representations, and Prospects,* Washington, D.C., 1996.

[3] In addition to works already cited, benchmark studies include E. B. Havell, "Indian Gardens," *House and Gardens* 6 (1904), 213–20; Oscar Reuther, *Indische Palaste und Wohnhauser,* Berlin, 1925; Marie Luise Gothein,

2. Waterworks on the middle terrace of Shalamar garden, Lahore, Pakistan

Henry Cole to the current conservation projects by Indian and Pakistani archaeologists, architects, and landscape architects (Fig. 3).[4]

So it might reasonably be asked, what more can be said about the development of Mughal gardens research at present? Of course, compared with European garden research, there is enormous scope for additional research of every sort—archaeological, archival, interpretative—as well as for further commentary on earlier work. But cataloging those needs, and their relations to past research, is not the aim of this paper.

Instead, I want to show that as recent work on Mughal gardens was being completed, the situation changed in ways that warrant a reappraisal of the field. There was rapid devel-

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Indische Garten, Munich, 1926; R. Jairazbhoy, "Early Garden-Palaces of the Great Mughals," *Oriental Art* 4 (1958), 68–75; Sylvia Crowe et al., *The Gardens of Mughal India*, London, 1972; Elizabeth B. Moynihan, *Paradise as a Garden in Persia and Mughal India*, New York, 1979; Saifur R. Dar, *Historical Gardens of Lahore*, Lahore, 1982; and Subhash Parihar, *Mughal Monuments in the Punjab and Haryana*, Delhi, 1985. Recent historiographic perspectives include James L. Wescoat Jr. and Joachim Wolschke-Bulmahn, "Sources, Places, Representations, Prospects: A Perspective of Mughal Gardens," 5–30, and Elizabeth B. Moynihan, "But What a Happiness to Have Known Babur," 95–126, both in *Mughal Gardens*, ed. Wescoat and Wolschke-Bulmahn; as well as James L. Wescoat Jr. , "The Mughal Gardens Project in Lahore," in *The Mughal Garden*, ed. Hussain, Rehman, and Wescoat, 9–22.

[4] Muhammad Yusuf Awan, "Conservation of Historic Buildings and Gardens in Lahore: Implications for a National Conservation Policy for Pakistan," 143 ff.; Michael Brand, "Surveying Shahdara," 123–29; Mahmood Hussain, "Conservation of Garden Sites and Urban Sprawl in Lahore," 165–72; Sajjad Kausar, "Shalamar Garden, Lahore," 133–42; and M. Rafique Mughal, "Theory and Practice in Garden Conservation," 111–14, all in *The Mughal Garden*, ed. Hussain, Rehman, and Wescoat.

Mughal Garden Research		Mughal Garden Conservation	
1995	Smithsonian Mughal Gardens Project, *Mughal Gardens* and *The Mughal Garden* Moynihan, "The Lotus Garden Palace" Parihar, *Mughal Monuments in Punjab*	1996	Mehtab Bagh, Agra; Kashmiri Gardens; Jahangir's Tomb-Garden, Lahore; Anjuman Mimaran, Pakistan
1980	Moynihan, *Paradise as a Garden*	1980	Pakistan Institute for Nuclear Science and Technology, "Leakage Investigation . . . Shalamar Garden, Lahore"
1970	Crowe et al., *The Gardens of Mughal India*	1970	International Council of Monuments and Sites Committee conference on Islamic gardens
1960	Jairazbhoy, "Early Garden-Palaces"	1960	
1950		1950	Independence of India and Pakistan leads to separate departments of archaeology
1940		1940	
1930	Gothein, *Indische Garten* Reuther, *Indische Palaste*	1930	
1920		1920	Marshall, *Conservation Manual*
1910	Villiers-Stuart, *Gardens of the Great Mughals*	1910	
1900	Havell, "Indian Gardens"	1900	
		1890	Archaeological Survey of India, *Annual Reports, Memoirs*
		1880	Cole, *Reports of the Curator of Ancient Monuments; Tomb of Jahangir*

3. Timeline of major writings on the history and conservation of Mughal gardens

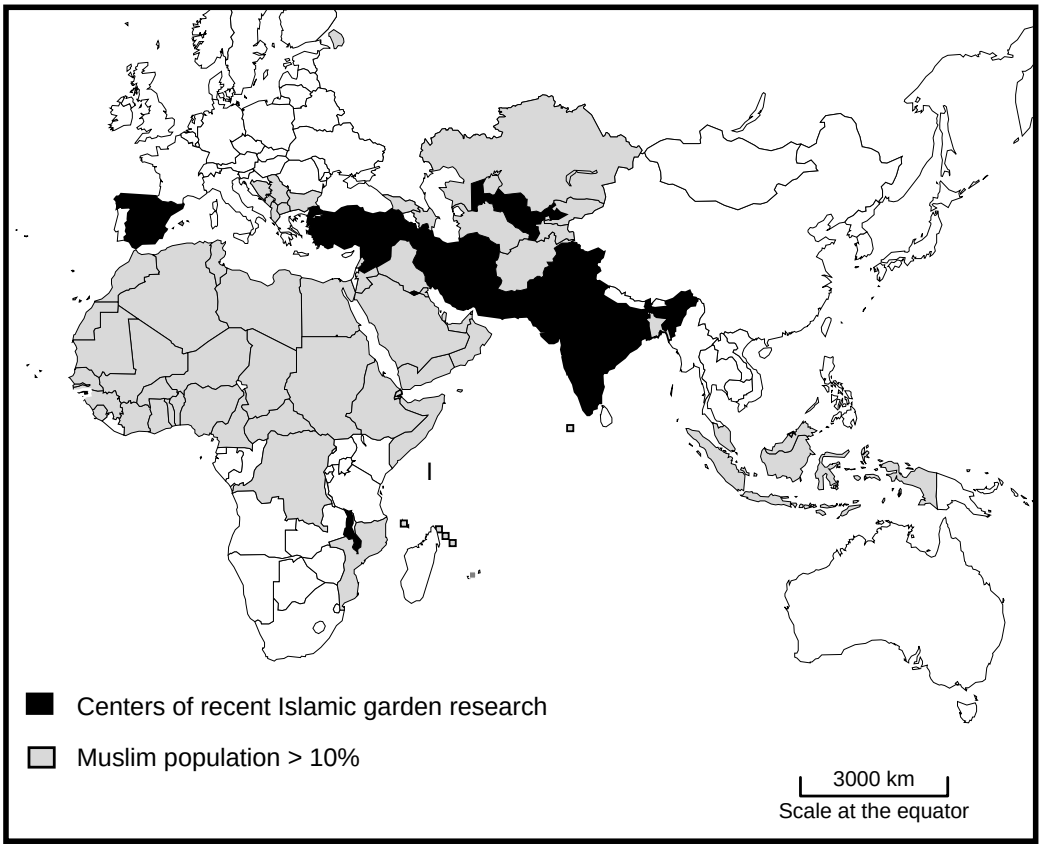
opment of garden research in regions connected with the Mughal Empire, including Central Asia, Persia, Turkey, Egypt, Spain, and parts of Europe. Those works open up the prospect of regional comparison that could lead to new perspectives on Mughal gardens, that is, to a "re-emergence of comparative possibilities."[5] At the same time, there are growing concerns that these scholarly advances do not speak to the pressing problems of landscape conservation, experience, conflict, and design in South Asia today, hence the other half of my subtitle, "the wavering of practical concern." But first, highlights of the emerging situation of Mughal gardens research, beginning with garden research in regions related to the Mughal realm (Fig. 4).

The Emerging Situation

New Regional Research

Timurid Central Asia. It is well known that Mughal gardens descended from Timurid Central Asia, but in 1995 Maria Eva Subtelny showed just how that transmission occurred

[5] Over the past century of garden history, there have been several waves of literature comparing Mughal gardens with other realms of Islamic or Oriental garden design, as will be discussed in a later section of the paper. In the 1980s and early 1990s, in contrast, research focused on specifically Mughal places and developments.



4. Regional centers of Indian and Islamic garden research

by reexamining a Timurid garden treatise, the *Irshad al-Zira'a*.[6] The author, patron, and family of that text had an enormous influence on the Timurid gardens of Herat, which the first Mughal ruler, Babur, saw at a formative moment in his career.[7] But Subtelny also revealed their influence on the earliest Mughal gardens in Agra and Delhi, including Humayun's tomb, thus establishing a historical connection between Timurid and Mughal landscape design.

Roya Marefat has shed new light on the Timurid antecedents of Mughal gardens at the Shah-i Zinda funerary complex in Uzbekistan, and Robert McChesney has linked

[6] Maria Eva Subtelny, "A Medieval Persian Agricultural Manual in Context: The Irshad al-Zira'a in Late Timurid and Early Safavid Khorasan," *Studia Iranica* 22 (1993), 167–217; idem, "Mirak-i Sayyid Ghiyas and the Timurid Tradition of Landscape Architecture," *Studia Iranica* 24 (1995), 19–60; idem, "Agriculture and the Timurid *Chaharbagh*: The Evidence from a Medieval Persian Agricultural Manual," in *Gardens in the Time of the Great Muslim Empires,* ed. Petruccioli, 110–28.

[7] Zahir ud Din Muhammad Babur, *Baburnama,* trans. W. Thackston, Washington, D.C., 1996; James L. Wescoat Jr., "Gardens vs. Citadels: The Territorial Context of Early Mughal Gardens," in *Garden History: Issues, Approaches, Methods,* ed. John Dixon Hunt, Washington, D.C., 1992, 331–58; and idem, "Gardens of Conquest."

gardens with land ownership and property transactions in Bukhara.[8] Lisa Golombek and Roya Marefat underscore the importance of Timurid garden patronage by and for women, a theme taken up by Ellison Findly and others in the context of Mughal India.[9]

Persia. Although garden history has slowed since the revolution in Iran in 1979, some important advances have occurred there. Bernard O'Kane shows how gardens mediated nomadic and urbane cultural traditions, effecting a transition "from tents to pavilions," though not a full resolution of the cultural tensions therein, which is in many respects analogous with Timurid and Mughal landscape history.[10] Mahvash Alemi raises new questions about European images, prints, and drawings of Persian gardens as a source of historical evidence.[11]

South Asia. In India, Sultanate gardens and waterworks have received detailed examination in relation to Mughal gardens.[12] Curiously, Hindu and Buddhist garden history remain separate, less-developed fields of inquiry. However, a substantial body of landscape evidence deals with Vijayanagar, a medieval Hindu kingdom in southern India roughly contemporary with the Timurid period, which undertook subtle processes of "Islamicization" in selected cultural forms.[13] The most substantial garden archaeology project in South Asia, however, is underway at Sigiriya, Sri Lanka. Built a millennium before the Mughal period, Sigiriya has striking similarities in layout and design which have yet to be formally compared with later Indian or Islamic gardens.[14] Brief notice also appeared in 1996 of a Mughal

[8] Roya Marefat, "Beyond the Architecture of Death: The Shrine of the Shah-i Zinda at Samarqand," Ph.D. diss., Harvard University, 1991; Robert 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*, ed. Petruccioli, 97–109.

[9] Lisa Golombek, "The Gardens of Timur: New Perspectives," *Muqarnas* 12 (1995), 137–47; idem, "Timur's Gardens: The Feminine Perspective," in *The Mughal Garden*, ed. Hussain, Rehman, and Wescoat, 29–36; Roya Marefat, "Timurid Women: Patronage and Power," *Asian Art* (Spring 1993), 28–49; Ellison Findly, "Nur Jahan's Embroidery Trade and Flowers of the Taj Mahal," *Asian Art and Culture* 9 (1996), 7–25; idem, *Nur Jahan, Empress of Mughal India*, Oxford, 1993.

[10] Bernard O'Kane, "From Tents to Pavilions: Royal Mobility and Persian Palace Design," *Ars Orientalis* 23 (1993), 249–68.

[11] Mahvash Alemi, "The Royal Gardens of the Safavid Period: Types and Models," in *Gardens in the Time of the Great Muslim Empires*, ed. Petruccioli, 72–96.

[12] E.g., Anthony Welch, "Gardens that Babur Did Not Like: Landscape, Water, and Architecture for the Sultans of Delhi," in *Mughal Gardens*, ed. Wescoat and Wolschke-Bulmahn, 59-93; Yves Porter, "Jardins Pre-Moghols," in *Jardins d'Orient*, Res Orientales, Paris, 1991, 37–54. Unfortunately, Allen Thrasher's 1992 Dumbarton Oaks symposium paper on Sanskrit garden texts remains unpublished. A regional history that encompasses pre- and post-Mughal eras is Saifur Rehman Dar, "Whither the Historical Gardens of Punjab? Garden Traditions of Punjab," in *The Mughal Garden*, ed. Hussain, Rehman, and Wescoat, 37–54. Catherine Asher's work provides a highly nuanced treatment of Hindu and Muslim garden patronage during the Mughal period, e.g., "Gardens of the Nobility: Raja Man Singh and the Bagh-i Wah," in ibid., 61–72.

[13] George Michell, *Architecture and Art of Southern India: Vijayanagar and the Successor States*, Cambridge, 1995; Burton Stein, *Vijayanagar*, Cambridge, 1989; Philip B. Wagoner, " 'Sultan among Hindu Kings': Dress, Titles, and the Islamicization of Hindu Culture at Vijayanagar," *The Journal of Asian Studies* 55 (1996), 851–80.

[14] Seneca Bandaranayake, "Presentation on the Excavations and Ethnoarchaeology of Garden and Urban Design at Sigiriya," paper presented at East-West Center, Honolulu, 1991.

natural history manuscript titled *Farhang-i-Aurang-Shahi,* dating to the reign of Aurangzeb (1658–1707 C.E.).[15]

Syria and Iraq. The 1976 Dumbarton Oaks Colloquium volume *Islamic Gardens* noted a paucity of research on gardens in Arab and Turkish regions, but several recent developments shed light on their historical connections with and potential relevance for Mughal gardens. The early model of monumental Abbasid gardens along the Tigris River at Samarra, for example, may have diffused into eastern as well as western Islamic realms.[16] Yasser Tabbaa showed how the reduction in scale of courtyard-garden complexes at Aleppo, compared with earlier sites such as Samarra, was accompanied by increased refinement in the design of garden spaces and waterworks.[17]

Turkey. In Turkey, Scott Redford has excavated Seljuk garden sites at Alanya, pushing back the record of Islamic garden archaeology in that region to the thirteenth century, and demonstrating the importance of archaeological inquiry for Islamic garden research.[18] Redford also frames Seljuk garden sites in relation to antecedent Greek-speaking Christian cultures in a way that suggests lines of comparison between Muslim and Hindu garden landscapes in India. For the Ottoman period, Gulru Necipoglu has published on both interior courtyard gardens of the Topkapi Palace and the suburban garden landscapes of Istanbul.[19]

Al-Andalus (Spain). The most vigorous conceptual and methodological experiments in Islamic garden research are taking place in Spain. James Dickie has developed a typology of Moorish gardens that builds upon the Roman antecedents of the *hortus* (which becomes *rawda*), *vigna* (*manjara*), *domus urbana* (the palatine gardens of the Madinat al-Zahra and Alhambra), and *villa rustica* (such as those surrounding the Generalife).[20] The classical roots and pragmatic experimental character of Andalusion agronomy are boldly surveyed by Karl Butzer, who puts forward hypotheses about the evolution of Islamic agronomic sciences in relation to social and cultural history in ways that invite comparative inquiry with the Persianate realm.[21]

[15] James J. White, "A Seventeenth-Century Persian Manuscript in the Asiatic Society, Calcutta," *Huntia* 9, 2 (1996), 175–78.

[16] Alastair Northedge, "An Interpretation of the Palace of the Caliph at Samarra (Dar al-Khilafa or Jawsaq al-Khaqani)," *Ars Orientalis* 23 (1993), 143–70.

[17] Yasser Tabbaa, "Circles of Power: Palace, Citadel, and City in Ayubbid Aleppo," *Ars Orientalis* 23 (1993), 186–87.

[18] Scott Redford, "Thirteenth-Century Rum Seljuk Palaces and Palace Imagery," *Ars Orientalis* 23 (1993), 219–36.

[19] Gulru Necipoglu, "The Suburban Landscape of Sixteenth-Century Istanbul as a Mirror of Classical Ottoman Garden Culture," in *Gardens in the Time of the Great Muslim Empires,* ed. Petruccioli; idem, *Architecture, Ceremonial, and Power: The Topkapi Palace in the Fifteenth and Sixteenth Centuries,* Cambridge, Mass., 1991.

[20] James Dickie (Yaqub Zaki), "The Hispano-Arab Garden: Notes toward a Typology," in *The Legacy of Muslim Spain,* ed. S. K. Jayyusi, Leiden, 1992; idem, "Garden V(3)(iii), Islamic Spain," in *The Dictionary of Art,* ed. Jane Turner, vol. 12, New York, 1996.

[21] Karl Butzer, "The Islamic Traditions of Agroecology: Crosscultural Experience, Ideas, and Innovations," *ECUMENE: Journal of Environment, Culture, and Meaning* 1 (1994), 1–50. See also John Harvey, "Garden Plants of Moorish Spain," *Garden History* 3 (1975), 10–22; Andrew M. Watson, *Agricultural Innovation in the*

Most significant for garden research per se are D. Fairchild Ruggles's pioneering efforts to integrate different disciplinary perspectives, including those of agronomic, visual, poetic, and historical modes of garden analysis, in her research at the Madinat al-Zahra complex near Cordoba.[22] She examines how the garden was seen and used, to gaze upon peoples and places, and how those structures of vision were related to the social and spatial structure of power in Cordoban culture, a line of analysis she recently extended to Humayun's tomb-garden in Delhi.[23] Ruggles also retraces the diffusion of garden models from Samarra in Iraq to Spain and thence to Qala Bani Hammad in Algeria.

Most recently, Elizabeth Dean Hermann has presented a dissertation on urban landscape history under the Nasrids in fourteenth-century Granada, extending the scale of garden research to the city and its countryside, and linking it with processes of political control and disease ecology.[24] Hermann is the first professional landscape architect to write a dissertation on Islamic garden history. She and others at Harvard and the University of Pennsylvania are now examining the historical connections between Islamic and Italian gardens in Spain and Italy—which takes us to the theme of comparison, and to the second set of developments that are transforming the situation of Mughal garden studies.[25]

Comparative Research

The literature on Islamic gardens in the 1970s frequently compared (or juxtaposed) Mughal, Persian, and Moorish gardens.[26] During the 1980s greater emphasis was placed on regional garden research, as surveyed above, which paved the way for a new round of comparison (Fig. 5). The new comparisons take three geographic patterns: Mediterranean, pan-Islamic, and multiregional.

Early Islamic World: The Diffusion of Crops and Farming Techniques, 700–1100, Cambridge, 1983; Irfan Habib, "Notes on the Economic and Social Aspects of Mughal Gardens," in *Mughal Gardens*, ed. Wescoat and Wolschke-Bulmahn, 127–38; and note 6, above.

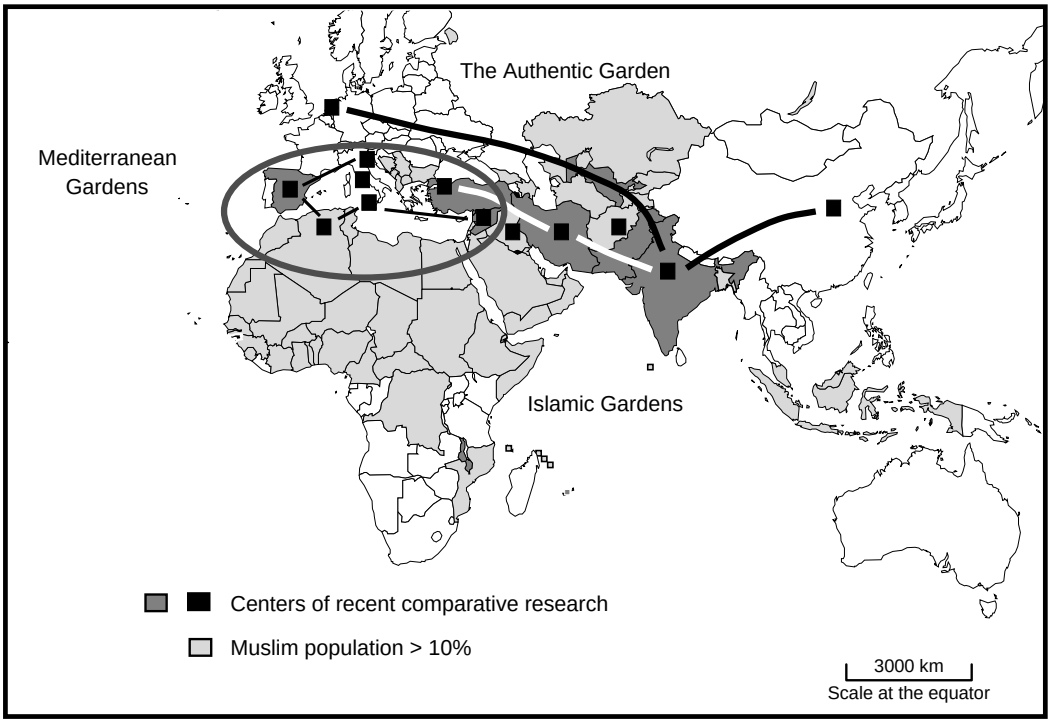
[22] D. Fairchild Ruggles, "Madinat al-Zahra's Constructed Landscape: A Case Study in Islamic Garden and Architectural History," Ph.D. diss., University of Pennsylvania, 1991; idem, "Vision and Power at the Qala Bani Hammad in Islamic North Africa," *Journal of Garden History* 14 (1994), 28–41; idem, "The Gardens of the Alhambra and the Concept of the Garden in Islamic Spain," in *Al-Andalus: The Art of Islamic Spain*, ed. Jerrilyn D. Dodds, New York, 1992, 163–72; idem, "The Mirador in Abassid and Hispano-Umayyad Garden Typology," *Muqarnas* 7 (1990), 73–82; idem, "Historiography and the Rediscovery of Madinat al-Zahra," *Islamic Studies* 30 (1990), 129–40; idem, "A Mythology of an Agrarian Ideal," *Environmental Design: Journal of the Islamic Environmental Design Research Centre* (1986), 24–27.

[23] Ruggles, "Humayun's Tomb and Garden."

[24] Elizabeth Dean Hermann, "Urban Formation and Landscape: Symbol and Agent of Social, Political, and Environmental Change in Fourteenth-Century Nasrid Granada," Ph.D. diss., Harvard University, 1996.

[25] I refer to seminars on "Mediterranean architecture" led by Mirka Beneš, Howard Burns, and Gulru Necipoglu as well as Hermann. See also Cammy Brothers, "The Renaissance Reception of the Alhambra: The Letters of Andrea Navagero and the Palace of Charles V," *Muqarnas* 11 (1994), 79–102.

[26] *The Islamic Garden*, ed. Elisabeth B. MacDougall and Richard Ettinghausen, Washington, D.C., 1976, included a chapter on Mughal gardens, as did John Brookes, *Gardens of Paradise: The History and Design of the Great Islamic Gardens*, London, 1987; and Jonas Lehrman, *Earthly Paradise: Garden and Courtyard in Islam*, Berkeley, 1980.



5. Areas of recent comparative garden research involving Indian and Islamic gardens

Mediterranean comparisons. Studies examining the Mediterranean concentrate on Spanish, Maghribi, Sicilian, and Italian gardens. Tabbaa and Ruggles retrace the historical links between gardens of the eastern Abbasid capitals at Samarra and Ghazna with those of the Umayyad west in Spain and Sicily although these gardens are not directly connected with Mughal realms to the east.[27] These Mediterranean studies focus on contact and transmission (i.e., genealogy) more than on similarities and differences in garden form, function, or meaning (i.e., comparison in a formal sense).

Pan-Islamic comparisons. Interest in genealogy and comparison converge in pan-Islamic garden histories spanning areas from Spain to India (usually omitting Southeast Asia). Although this genre has tended to simply juxtapose gardens from different regions to exemplify a common theme, such as paradise symbolism, several studies have begun to undertake more formal and societal comparisons.[28] Necipoglu's volume on pre-modern Islamic palaces, which includes numerous brief references to gardens, compares Ottoman,

[27] Yasser Tabbaa, "The Medieval Islamic Garden: Typology and Hydraulics," in *Garden History,* ed. Hunt, 303–29; Ruggles, "Vision and Power"; idem, "The Mirador in Abassid."

[28] Books on paradise gardens and chapters on the Islamic garden emphasize the similarities and historical connections over the differences and independent developments in different periods and realms of Muslim garden design. Most recently, see Hermann Forkl et al., eds., *Die Garten des Islam,* Stuttgart, 1993.

6. The jharoka *marble window in the Diwan-i Am pavilion in Lahore Fort, Pakistan*

Safavid, and Mughal palace architecture using the theoretical framework of the "gaze" to illuminate differences among the three dynasties and to counter monolithic representations of them and their architectures.[29]

It should be noted, however, that while Western scholars study the power and logic of the gaze, South Asian archaeologists show more interest in the *gaz*, i.e., the physical unit of measurement used to lay out gardens and other sites. They focus on the *gaz* to understand how gardens were physically constructed and spatially organized.[30] Analysis of the *gaz* reveals a logic of numbers in gardens that were decimally proportioned and points toward principles of proportion in Mughal garden layout. Analysis of the gaze, by contrast, concentrates on phenomena such as *jharoka* windows where kings appeared as much to be seen in ways that would maintain the symbolic order, stability, and beauty of their empire as to oversee their lands and peoples (Fig. 6). In Mughal times, *gaz* and gaze were closely related to one another. Gaps between them arose as colonial archaeological and art historical scholarship diverged in the nineteenth century, and later widened to serve more distant geo-

[29] Gulru Necipoglu, "An Outline of Shifting Paradigms in the Palatial Architecture of the Pre-Modern Islamic World," *Ars Orientalis* 23 (1993), 3–26; idem, "Framing the Gaze in Ottoman, Safavid, and Mughal Palaces," *Ars Orientalis* 23 (1993), 303–42.

[30] For elaborations of this point, see Wescoat, "The Mughal Gardens Project in Lahore"; and Wescoat, Brand, and Mir, "Shahdara Gardens."

graphic and cultural audiences in the post-colonial world. But the historiographical gap between *gaz* and gaze may be more easily bridged than the gulf between these scholarly perspectives and the unfathomed realms of popular garden experience, past and present, which pose challenges revisited later in this paper.

Attilio Petruccioli has pioneered pan-Islamic garden research in special issues of *Environmental Design* that deal with relationships between gardens and urbanism in Muslim societies.[31] Petruccioli has published an edited volume, *Il giardino islamico: Architettura, natura, paesaggio,* which explores the forms, contexts, and expressions of Islamic gardens. Most recently, he has edited a special issue of *Muqarnas* on what Italian scholars call "territory," the regional contexts of Islamic garden design.[32]

Multiregional comparisons. A probing comparative effort was published in a special issue of *Marg,* an Indian art and architecture magazine, on the patronage of the Mughals and Medicis. In that volume Ebba Koch explored the diffusion of *pietra dura* floral inlay work used in Michelangelo's chapel at the church of San Lorenzo in Florence and Shah Jahan's palace and tomb architecture in Delhi and Agra.[33] Although not writing about Mughal gardens per se, Jan Pieper compared the hanging gardens of Rajasthan with those of Renaissance Italy.[34]

Other long-distance comparisons include Tabbaa's and Ruggles's examinations of the influences of Samarra on palace-garden complexes in Syria and Spain; Findly's study of international trade and diplomatic gift-giving as they influenced floral ornament in Indian textiles; Vivian Rich's examination of European herbal images in Mughal floral painting; and botanical contacts between Europe and Asia, including a recent article on Mughal botanical illustration.[35] Ruggles has also adapted visual methods of analysis developed in Moorish gardens to a case study of visual experience at Humayun's tomb.[36]

More wide-ranging experiments pursue such themes as the authentic garden, which encompasses Dutch, Islamic, and Chinese gardens, and a collection of essays on gardens of the Orient, which ranges from ancient to modern southwest Asia.[37] Although somewhat unclear about their comparative aims and methods, these efforts challenge conventional categories of garden history in Europe and Asia.

[31] Attilio Petruccioli, ed., *Environmental Design: Journal of the Islamic Environmental Design Research Centre*, 1 and 2 (1986), special issues, *City as Garden* and *Garden as City*.

[32] See note 1.

[33] Ebba Koch, "Pietre Dure and Other Artistic Contacts between the Court of the Mughals and that of the Medici," in *Patrons of Art: The Mughals and the Medici*, ed. Dalu Jones, *Marg* 39 (1988), 29–56.

[34] Jan Pieper, "Hanging Gardens in the Princely Capitals of Rajasthan and in Renaissance Italy: Sacred Space, Earthly Paradise, Secular Ritual," *Marg* 39 (1988), 69–90.

[35] Tabbaa, "Medieval Islamic Garden"; Ruggles, "Humayun's Tomb and Garden"; Findly, "Nur Jahan's Embroidery Trade"; Vivian Rich, "The Development of Mughal Floral Painting with Particular Reference to the Sixteenth and Seventeenth Centuries," Ph.D. diss., School of Oriental and African Studies, London, 1981; R. Desmond, *The European Discovery of Indian Flora*, Oxford, 1991; White, "Seventeenth-Century Persian Manuscript."

[36] Ruggles, "Humayun's Tomb and Garden."

[37] L. Tjon Sie Fat et al., *The Authentic Garden: A Symposium on Gardens*, Leiden, 1991; Rika Gyselen, ed., *Jardins d'Orient*, Res Orientales, Paris, 1991. China poses especially promising comparisons with Persianate gardens; see, for example, Philippe Foret, "Making an Imperial Landscape in Chengde, Jehol," Ph.D. diss., University of Chicago, 1992.

7. Asaf Khan's tomb-garden, Lahore, which has received little conservation attention for its architecture or garden plantings

Practical Issues

These comparative perspectives on garden cultures, past and present, raise questions about the relationship between academic research and the practical concerns of communities who use, visit, and work in Mughal gardens. The investigations cited above focus primarily on garden patronage, political symbolism, and genealogy. As intellectually stimulating as these themes are for our understanding of Mughal gardens, they do not engage the social, spatial, or environmental problems at extant garden sites, nor do they consider what difference such inquiry makes for modern landscape conservation, experience, or design.

Even garden conservation has been neglected (Figs. 7, 8). The loss of garden plantings is often lamented, but to little effect. The Smithsonian Mughal Gardens Project did bring together essays by archaeologists, curators, and conservationists. But those essays documented how generally neglected, ill-prepared, antiquated, and inconsequential garden conservation and restoration research have been in the region.[38] Elizabeth Moynihan's work on the Lotus Garden at Dholpur was committed to conservation of the site, and identified some of the practical difficulties of linking excavation, inquiry, and long-term conservation. Non-

[38] See Hussain, Rehman, and Wescoat, eds., *The Mughal Garden*, and note 4, above, on conservation chapters. The work of the Anjuman Mimaran, an architectural heritage organization in Lahore, stands out for its conservation projects in the Walled City of Lahore and documentation projects in Punjab province.

8. Layers of partially documented conservation work on the plinth of Jahangir's tomb-garden, Lahore, Pakistan

governmental conservation organizations such as the Anjuman Mimaran in Lahore, Indian National Trust for Art and Cultural Heritage (INTACH) in Delhi, and the Aga Khan Trust for Culture have undertaken important cultural heritage conservation experiments, and they are now beginning to consider garden projects.[39]

The aims and methods of Mughal garden conservation have evolved but little over the present century, and do not speak to the experience, interests, or problems of modern South Asian societies. Those societies include an increasingly large and diverse middle class tourism sector, for example, but with the exception of a National Park Service study of the riverfront gardens at Agra, there has been little research on tourist experience, behavior, or problems at Mughal gardens.[40] Tourism represents one of the largest sources of foreign exchange in India, but it also seems to encourage damaging interventions in the form of *son et lumiere* shows, concessions, and hasty restoration projects in Mughal gardens.

[39] For projects in Lahore, see James L. Wescoat Jr., "Waterworks and Culture in Metropolitan Lahore," *Asian Art and Culture* (Spring/Summer 1995), 21–36; and Wescoat and Wolschke-Bulmahn, "Mughal Gardens of Lahore." For recent perspectives on urban heritage conservation, including gardens, see Santosh Ghosh, *Architectural and Urban Conservation*, Calcutta, 1996.

[40] National Park Service, *Agra Heritage Project*, New Delhi, 1994. The University of Illinois Department of Landscape Architecture and Varanasi Development Authority collaborated on a landscape planning experiment at Sarnath. See *Sarnath: Design Guidelines and Case Studies for Tourism Development*, New Delhi, 1990, and *Sarnath: A Master Plan for Tourism Development*, New Delhi, 1989.

9. The destruction of a Sikh gurudwara *in Lahore, Pakistan, following riots and destruction of the Babri* masjid *(Babur's mosque) in Ayodhya, India*

Recent history has revealed how culturally sensitive Mughal sites can be, as when riots occurred at the Ayodhya mosque, built by Babur over what was believed to be the birthplace of Rama. That multidecade controversy and lawsuit ended when a fundamentalist Hindu mob tore the mosque to the ground.[41] Waves of retribution and counter-retribution followed against temples, mosques, and Sikh *gurudwara*s in India and Pakistan (Fig. 9).

Research on landscape conflict has not extended to Mughal gardens despite a significant record of litigation over their ownership, use, and conservation.[42] The project Pluralism and Its Cultural Expressions, sponsored by the Rockefeller Foundation and Aga Khan Trust for Culture, offers a promising approach to constructive communication and conflict resolution.[43] A park project outside Tehran, the Bagh Shadi Jamshediyeh, also reveals that good landscape design can weave together traditional and modern

[41] Reinhard Bernbeck and Susan Pollack, "Ayodhya, Archaeology, and Identity," *Current Anthropology* 37, suppl. (1996), 138 ff.; Sarvepalli Gopal, *Anatomy of a Confrontation: The Babri Masjid-Ramjanmabhumi Issue,* New Delhi, 1991.

[42] Cf. Richard Smardon and James Karp, *The Legal Landscape,* New York, 1992.

[43] Hassan Uddin Khan and Clifford Chanin, *Pluralism and Its Cultural Expressions,* Geneva and New York, 1995.

garden design in ways that provide "space for freedom" even in contexts of political, economic, and cultural turmoil.[44]

The links between garden history and landscape design in South Asia are weaker than those between architectural history and practice, which reflects the importance of sustained institutional and financial commitment from organizations such as the Aga Khan Trust for Culture.[45] Individual designers such as Ravindra Bhan and Elizabeth Moynihan in India and Sajjad Kausar and Kamal Khan Mumtaz in Pakistan have drawn inspiration from historic gardens for modern landscape design projects in ways that speak to contemporary situations.[46] Several landscape architecture master's theses also address the relations between historic gardens, landscape conservation, and modern parks.[47] But these examples are few in a region of one billion people. In the absence of landscape architecture programs in Pakistan and their early stage of development in India, the problems of landscape design in and around Mughal gardens seem formidable.

Underlying these practical problems is a lack of basic research on the nature of experience at Mughal gardens. Surprisingly, there have been no detailed studies of aesthetic experience at Mughal gardens in any era, past or present. There have been no studies of garden workers (*malis*) who are generally poor and of low status, garden visitors, or garden superintendents. Without such knowledge the odds of speaking to modern interests and concerns at Mughal gardens, or of influencing their conservation in any meaningful way, seem poor. Several decades ago, Marshall Hodgson wrote, "Perhaps such [cultural] traditions can be reduced to the status of museum pieces and local color for attracting tourists; or to eclectic sources of 'inspiration' for professional designers."[48] Tourism and eclectic inspiration are indeed evident at Mughal gardens today, but even they seem dimly understood. Thus, in addition to the gap between *gaz* and gaze mentioned earlier, we must also consider the widening gulf between historical research and the experiences of those who sit, walk, and work in these gardens (Figs. 10, 11). To date, there has been little probing research on what people actually experience or care about at Mughal gardens.

[44] Description of the Bagh Shadi Jamshediyeh, Tehran, Iran, presented by Dr. Mina Marefat on behalf of Gholam Reza Pasban Hazrat at the seminar "Sustainable Landscape Design in Arid Environments," Dumbarton Oaks, 7 December 1996.

[45] See, for example, Aga Khan Award for Architecture, *Toward an Architecture in the Spirit of Islam*, Proceedings of Seminar 1 in the series Architectural Transformations in the Islamic World, ed. Renata Holod, Aiglemont, Gouvieux, France, 1980; Aga Khan Award for Architecture, *Architecture for Islamic Societies Today*, ed. James Steele, London, 1994, especially on landscape design for the Diplomatic Quarter of Riyadh, Saudi Arabia; and Ismail Serageldin, ed., *Space for Freedom: The Search for Architectural Excellence in Muslim Societies*, London, 1989.

[46] See Hussain, Rehman, and Wescoat, eds., *The Mughal Garden*, 165 ff., for a brief treatment of their work. The Middle Eastern literature is more substantial. See Hesam Joma, "The Earth as a Mosque: Integration of the Traditional Islamic Environmental Planning Ethic with Agricultural and Water Development Policies in Saudi Arabia," Ph.D. diss., University of Pennsylvania, 1991; Timothy Cochrane and Jane Brown, eds., *Landscape Design for the Middle East*, London, 1978. A new Mughal garden design project underway at Lister Park in Bradford, England, speaks to the cultural interests of that community and is supported in part by the Heritage Lottery Fund. See http://www.bradford.gov.uk/art/mughal/mughal_frames.html.

[47] Saeeda Rasool, "From Private Gardens to Public Parks: A Study of Transformation in Landscape of Lahore, Pakistan," master's thesis, University of Illinois, Champaign, 1994; Najmus Saqib's master's project on Kamran's Baradari, Lahore, Department of Land, 1994.

[48] Marshall Hodgson, *The Venture of Islam*, vol. 3, Chicago, 1974, 430.

10. A local family posing in the Diwan-i Khas garden pavilion, Lahore Fort, Pakistan

11. Vendors in Shalamar garden, Lahore

12. The Mehtab Bagh project area across the Yamuna River from the Taj Mahal in Agra, India

13. Aerial view of Shalamar garden, Kashmir (photo: courtesy of Michael Brand)

Two new research projects have an opportunity to address this wavering of practical concern (Figs. 12, 13). The Mehtab Bagh project opposite the Taj Mahal on the Yamuna River in Agra is setting new archaeological standards for Mughal garden research. In addition to surface survey and historical documentation, it is using paleobotanical and excavation techniques. It also seeks to coordinate the interests of ministries of culture, tourism, and planning at multiple levels of government.[49] Another research project on the conservation of Mughal gardens in Kashmir also has an opportunity to speak to modern interests in garden history and conservation in that embattled region.[50]

Comparative Possibilities

On the one hand, the regional, comparative, and practical developments discussed above signal a reemergence of comparative opportunities for Mughal garden history. On the other hand, we still lack the basic conceptual, methodological, and practical apparati for comparative research. Mughal garden history depends upon comparative research in part because it fits so awkwardly within conventional categories of garden history—Indian, Islamic, medieval, and Persian.

Four fields of historical inquiry, however, have shaped the context and identity of Mughal gardens. They are Indo-Islamic garden history (a hybrid field), Indo-Islamic art and architectural history (another hybrid), world garden history, and world history at large. In each field, it is useful to ask the following questions: How are Mughal gardens defined? What is deemed to be significant about them? How significant have they been for the progress of that field? These questions entail large literatures ranging in scale from site to civilization, but several historiographic patterns may be sketched.

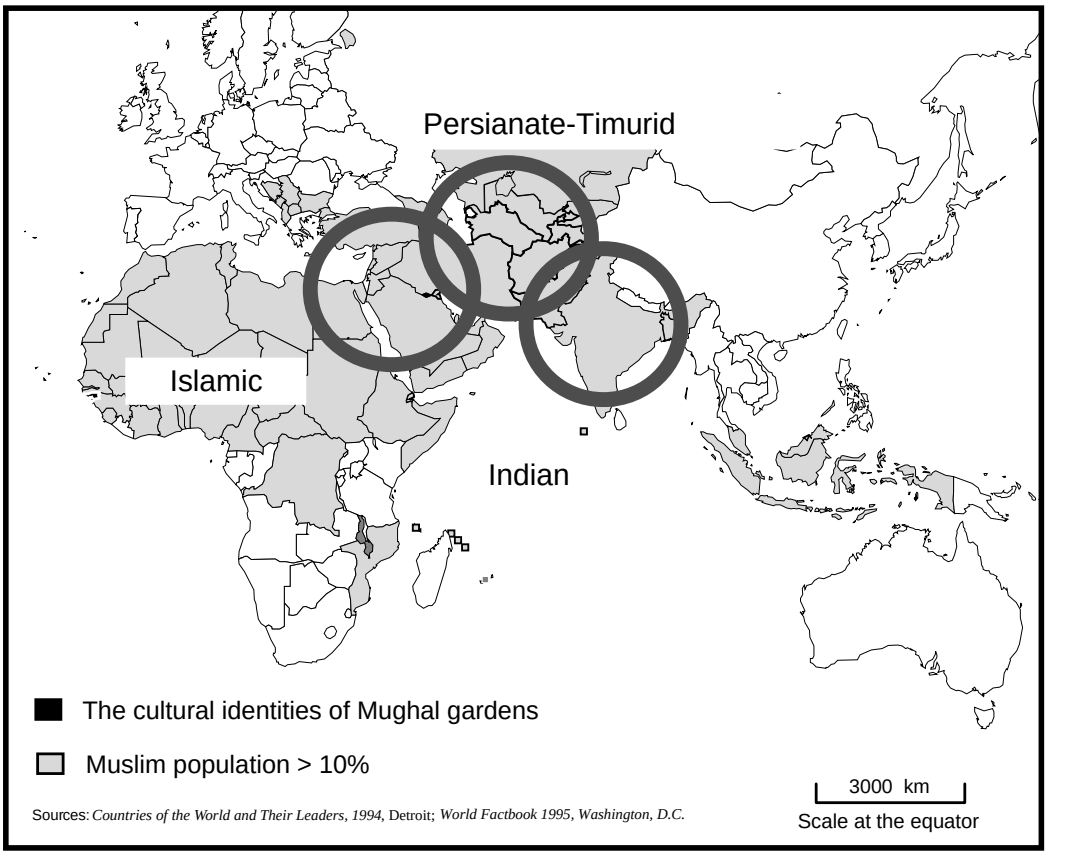
Perspectives from Indo-Islamic Garden History

Indo-Islamic garden history is a composite field that stands at the intersection of three broad cultural traditions: Indian, Islamic, and Timurid or Persianate (Fig. 14). In the early decades of this century, Mughal gardens were most often portrayed as "Indian gardens," constructed upon the ancient landscape foundations of Hindu and Buddhist civilization. Early garden historians such as Havell, Villiers-Stuart, and Gothein took this approach, stressing Hindu water, vegetation, and architectural symbolism.[51] Mughal gardens were envisioned as an adaptation of these older, more extensive traditions

[49] Elizabeth B. Moynihan, "Background on Proposal to Document the Mehtab Bagh," memo, 5 May 1996, copy on file with author. An ongoing lawsuit covering the larger Taj Trapezium region is one of the driving forces behind conservation efforts in the Agra metropolitan area. See *M. C. Mehta v. Union of India*, Supreme Court judgment, 30 December 1996, copy on file with author.

[50] Indian National Trust for Art and Cultural Heritage, personal communication, 10 April 1997.

[51] Havell, "Indian Gardens"; Gothein, *Indische Garten*; Reuther, *Indische Palaste und Wohnhauser*; Constance Mary Villiers-Stuart, *Gardens of the Great Mughals*, London, 1913. In her preface, Villiers-Stuart acknowledges the influences of Her Highness Maji Sahiba of Bharatpur, Her Highness Princess Bamba Duleep Singh, George Birdwood's treatise on the Christmas tree, and Havell (which reflect stronger Hindu than Muslim associations) (p. xi).



14. Centers of cultural identity relevant in Mughal garden history

more than as a foreign innovation or imposition upon a conquered land.[52] Recent examples of this approach include Saifur Rehman Dar on Punjabi gardens, Ali Akbar Hussain on Deccani gardens, and Catherine Asher on sub-imperial patronage. They shed light on the cultural continuities and relations among Hindu, Sikh, Muslim, and colonial garden traditions.[53] Asher, for example, shows how Hindu and Muslim iconographies of light and political authority were combined in the patronage of Raja Man Singh, a Hindu Rajput noble in Akbar's court.[54]

[52] Villiers-Stuart stressed the Hindu symbolism at Akbar's tomb at Sikandra. Cf. Dickie, "The Mughal Garden"; and Ram Nath, "Persian Inscriptions of the Upper Gallery of Akbar's Tomb at Sikandra, Agra: Contents and Raison d'Etre," *Journal of the Pakistan Historical Society* 34 (1986), 221–35.

[53] Dar, "Historical Gardens of Punjab"; Catherine Asher, "The Mughal Garden 'Wah' near Hasanabdal"; and Ali Akbar Hussain, "Qutb Shahi Garden Sites in Golconda and Hyderabad," all in *The Mughal Garden*, ed. Hussain, Rehman, and Wescoat.

[54] Catherine Asher, "Mughal Sub-Imperial Patronage: The Architecture of Raja Man Singh," in *Powers of Art: Patronage in Indian Culture*, ed. Barbara Stoler Miller, Delhi, 1992, 183–201; and idem, *The Architecture of Mughal India*, Cambridge, 1992.

Beginning at some point in the early 1970s, however, perhaps with the Dumbarton Oaks Colloquium "The Islamic Garden," Mughal gardens were increasingly viewed as a branch of Islamic garden history.[55] The Aga Khan architecture programs and the Islamic Environmental Design Research Centre in Rome encouraged inquiry in this direction. Greater attention was given to Qur'anic and Sufi sources of garden imagery and symbolism. Attilio Petruccioli's *Il giardino islamico,* is a recent example in this genre. Once Mughal gardens are viewed as a type of Islamic garden, a pattern of interpretation unfolds that illuminates the Muslim and partially eclipses the Hindu, Sikh, and European sources of Mughal garden history.

Elizabeth Moynihan's *Paradise as a Garden in Persia and Mughal India* effectively balances these Islamic and Indian perspectives on Mughal gardens with a third cultural tradition the "paradise garden" that originated in Persia and Central Asia.[56] Although the Persian connection had long been known, it was not effectively woven together with Indian and Islamic perspectives before Moynihan's book.[57] The Timurid-Persianate perspective is advancing in related fields of art and architectural history, and it now dominates but does not fully erase or subsume the other two approaches.[58]

These three categories of cultural identity were important for the Mughals themselves. The first Mughal ruler, Babur, sought to distinguish his gardens from antecedent Indian ones.[59] The third ruler, Akbar, although not a great garden builder, promoted syntheses of Hindu, Muslim, and Timurid traditions in art and architecture as well as constructive engagement with foreign cultures, including Jesuit missionaries and European ambassadors to his court.[60] Islamic theology, strictly construed, had less significance in garden design than in mosques, madrassahs, mazars, and public works.[61] As with other facets of Mughal culture, gardens acquired significance as political media for processes of "Islamicization" in Hindu and Rajput building, and vice versa.[62] In Mughal times, as at

[55] Although critical of the term "Islamic garden," I have retained much of its scope and implications, e.g., in James L. Wescoat Jr., "The Islamic Garden: Issues for Landscape Research," *Environmental Design: Journal of the Islamic Environmental Design Research Centre* (1986), and "Gardens of the *Qur'an*."

[56] Moynihan's *Paradise as a Garden* has a clear regional focus on the Persianate and Timurid realm. Other authors have invoked the term "paradise garden" to refer more broadly to Muslim garden traditions from Spain to India and pre-Islamic Persian antecedents, which conflates Persian and broader Muslim and classical conceptions of "paradise" and "garden."

[57] For a perspective on the Timurid-Persianate identity of the Mughals, see Hodgson, *The Venture of Islam,* 59 ff.

[58] Lisa Golombek and Donald Wilber, *The Timurid Architecture of Iran and Turan,* 2 vols., Princeton, 1988; Tom Lentz and Glenn Lowry, *Timur and the Princely Vision: Persian Art and Culture in the Fifteenth Century,* Washington, D.C., and Los Angeles, 1992.

[59] For various interpretations of Babur's attitudes, see Moynihan, "But What a Happiness"; Welch, "Gardens that Babur Did Not Like"; and Wescoat, "Gardens of Conquest."

[60] Asher, *Architecture of Mughal India*; Ebba Koch, *Mughal Architecture: An Outline of Its History and Development, 1526–1858,* Munich, 1991.

[61] On Babur's limited religious patronage, see Howard Crane, "The Patronage of Zahir al-Din Babur and the Origins of Mughal Architecture," *Bulletin of the Asia Institute* 1 (1987), 95–110. Cf. Wescoat, "Gardens of the *Qur'an*."

[62] See Wagoner, "Sultan among Hindu Kings." "Islamicization" builds upon Marshall Hodgson's theoretical framework for the diffusions and transformation of Muslim (vis-à-vis Islamic or religious) culture.

Ayodhya today, the identity politics of landscape design could reinforce the unifying, or differentiating, forces in society at large. Most modern garden historians take a syncretic approach to the cultural identity of Mughal gardens, an approach that fits the subject well but figures awkwardly with broader fields of historical inquiry, as the following perspectives indicate.

Perspectives from Indo-Islamic Art and Architectural History

Gardens receive little attention in surveys of Indian or Islamic art and architectural history.[63] Some works offer a couple of paragraphs and some indexing of gardens, but none devotes a chapter or significant portion of a chapter to gardens. On the one hand, this reflects a conceptual and spatial gap between chapters on buildings, which are treated like monuments or objects, and chapters on the historical and civilizational context of those monuments. The scales of landscape and garden—the mesoscales—fall between the rubrics of monument and city.[64] On the other hand, architectural surveys do employ other spatial categories that subsume gardens in various ways, e.g., as elements of a tomb complex, palace complex, and fortress complex. Under that approach, gardens become a secondary level of analysis contingent upon the primary function of the building complex. Against that approach, Ebba Koch has shown that Mughal funerary architecture has close affinities with both residential and palace architecture, which renders such functional classifications less useful than landscape approaches in which gardens would figure more prominently.[65]

Garden historians may still profit from analogies with Indian and Islamic architectural history. Architectural comparisons of Mughal, Safavid, Ottoman, and European architecture, for example, indicate promising avenues for comparative garden research.[66]

Perspectives from World Garden History

Mughal gardens receive greater attention in world garden histories, in which, how-

[63] There are few garden references, for example, in Sheila S. Blair and Jonathan M. Bloom, *The Art and Architecture of Islam, 1250–1800*, New Haven, 1994; Percy Brown, *Indian Architecture: The Islamic Period*, Bombay, 1942; Richard Ettinghausen and Oleg Grabar, *The Art and Architecture of Islam, 600–1250*, Hammondsworth, 1987; James Fergusson, *History of Indian and Eastern Architecture*, London, 1910; Ernest B. Havell, *A Handbook of Indian Art*, London, 1920; Robert Hillenbrand, *Islamic Architecture: Form, Function, and Meaning*, New York, 1994; John D. Hoag, *Islamic Architecture*, New York, 1975; Ernst Kuhnel, *Islamic Art and Architecture*, trans. K. Watson, London, 1966; George Michell, ed., *Architecture of the Islamic World: Its History and Social Meaning*, London, 1978; and Giovanni T. Rivoira, *Moslem Architecture: Its Origins and Development*, trans. G. N. Rushforth, London, 1918.

[64] Even the massive collection of articles on Islamic art in *The Dictionary of Art*, vol. 16, ed. Turner, New York, 1996, 94–560, omits gardens and landscape (consigning "gardens" to a separate entry). These omissions are surprising in light of Grabar's well-known chapter, "The Symbolic Appropriation of the Land," in *The Formation of Islamic Art*, New Haven, 1973. Golombek and Wilber, *Timurid Architecture*, include a short chapter on gardens.

[65] Koch, *Mughal Architecture;* also idem, "The Char Bagh Conquers the Citadel: An Outline of the Development of the Mughal Palace Garden," in *The Mughal Garden*, ed. Hussain, Rehman, and Wescoat, 55–60.

[66] See John Hoag, "The Tomb of Ulugh Beg and Abdu Razzaq at Ghazni: A Model for the Taj Mahal," *Journal of the Society of Architectural Historians* 4 (1968), 234–48; and Necipoglu, "Framing the Gaze."

ever, their identity problems become acute. A survey of world garden histories reveals four basic patterns of treatment: no mention, a chapter at the beginning, a chapter at the end, and multiple references.

Some histories omit Mughal gardens altogether.[67] Such lapses occurred in late nineteenth and early twentieth-century accounts that followed an "ancient-medieval-oriental" narrative in which Indian gardens were classified as ancient, Moorish gardens as medieval, and East Asian gardens as Oriental. Mughal gardens did not fit. Similar results obtained in "ancient-medieval-Renaissance" narratives that led from the ancient world, including India, to modern Europe, leaving seventeenth-century Asia out. The most surprising example of the first case occurred in Marie Luise Gothein's otherwise excellent *Geschichte der Gartenkunst*. She later wrote a full monograph, *Indische Garten*.[68]

Most twentieth-century garden histories include one or more chapters on Islamic gardens that contain a section on Mughal gardens.[69] Those sections are situated after the chapter on ancient or medieval gardens but always anachronistically before the Renaissance!

A small number of nineteenth-century garden histories, such as those of John Claudius Loudon and Marcel Fouquier, place "Oriental gardens," including Mughal gardens, at the end of a survey that begins with the ancient Mediterranean and proceeds to modern Europe or America.[70] In contrast to his otherwise detailed garden survey by regions, for example, Loudon crudely asserted that as there had been no historical development of non-European garden traditions, they are best described under the heading of the "present situation."[71] From that perspective, "Oriental gardens" have no history except insofar as they are studied, borrowed, or rejected in Europe.

Two recent works address these category problems by discussing Indo-Islamic gardens in more than one cultural context and as having antecedents and connections in different periods and places. Although somewhat awkward and impressionistic, Geoffrey Jellicoe's *Landscape of Man* discusses India in ancient, Islamic, and modern contexts.[72] *The Dictionary of Art* discusses Mughal gardens under its South Asia heading with a cross-reference to the Islamic section (though no reference in the section on Central Asia and Iran).[73]

[67] Derek P. Clifford, *A History of Garden Design*, London, 1962; Sylvia Crowe, *Garden Design*, London, 1958; Francesco Fariello, *Architettura dei giardini*, Rome, 1967; Georges Gromort, *L'art des jardins*, Paris, 1934; Arthur Mangin, *Histoire jardins anciens et modernes*, Tours, 1887; Georges Riat, *L'art des jardins*, Paris, 1900; Albert F. Sieveking, *The Praise of Gardens: An Epitome of the Literature of the Garden Art*, London, 1899.

[68] Marie Luise Gothein, *Geschichte der Gartenkunst*, 2 vols., Berlin, 1914; idem, *Indische Garten*.

[69] Alfred-Auguste Ernouf and Adolphe Alphard, *L'art des jardins*, Paris, 1886; Norman T. Newton, *Design on the Land: The Development of Landscape Architecture*, Cambridge, Mass., 1971; Christopher Thacker, *The History of Gardens*, London, 1979.

[70] E.g., Marcel Fouquier and A. Duchene, *Des divers styles de jardins*, Paris, 1914.

[71] John Claudius Loudon, *An Encyclopedia of Gardening*, new ed., London, 1860. For a critique of such views, see Eric Wolf, *Europe and the People without History*, Berkeley, 1982.

[72] Geoffrey A. Jellicoe, *The Landscape of Man: Shaping the Environment from Prehistory to the Present Day*, London, 1975.

[73] Vivian Rich, "Gardens: Indian Subcontinent," 72–76, and Yasser Tabbaa, "Islamic Lands," 76–85, both in *The Dictionary of Art*, ed. Turner.

Such problems are nothing new for scholars of European gardens who regularly deal with the international transmissions of English, French, Dutch, German, and Italian gardens. But they have not yet extended that subtlety of awareness and interpretation to Indic or Islamic contexts. Indeed, as transnational research unfolds and the number and complexity of traditions increase, it is hard to imagine how any of the prevailing frameworks of world garden history would accommodate the results. Progress in world garden history, it seems to me, depends more upon creative approaches to historical geography than upon further advances in historiography. On the subject of historiography, however, it is worth pausing to consider how South Asian and Muslim scholars might write about Mughal gardens in a global context. This treatment has not yet happened, but we may turn to the field of world history for a sense of some of the issues involved.

Perspectives from World History

If we ask how Mughal gardens fit within "world historical" writing, which is experiencing a revival these days associated with concerns about globalization and global change, the answer is humbling (Fig. 15). There are not many references to Mughal gardens in world histories! Even so, debates among world historians have relevance for Mughal garden historiography. In 1956, for example, the Islamicist Marshall Hodgson wrote "In the Center of the Map: Nations See Themselves at the Hub of History," in which he put forward the now familiar argument that the historian's position influences the geographic center of historical inquiry.[74] He deviated from colleagues past and present by positing a "center of the world map" around what is today Iran. If we take his argument seriously and ask, where are the centers of the map relevant for Mughal garden history, we obtain some interesting results.

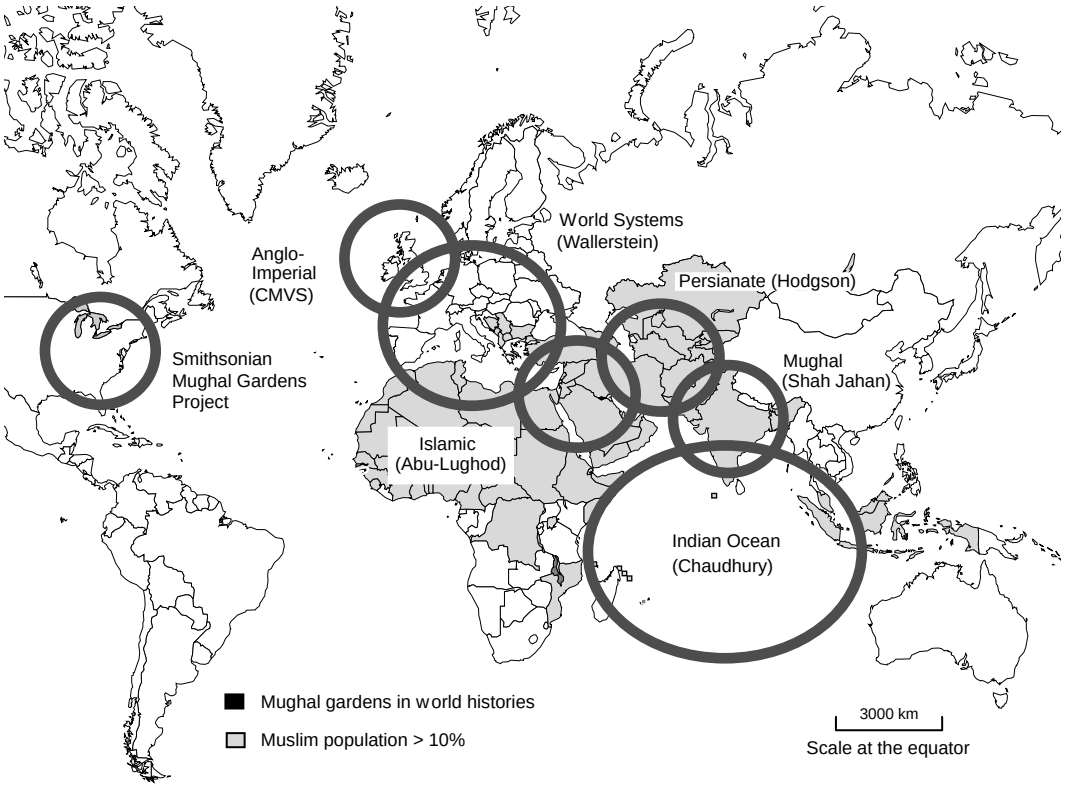
Anglo-Imperial. The earliest Mughal garden historians, Villiers-Stuart and Havell, were servants of the British Empire.[75] By no means a monolithic category, such writers engaged in debates among utilitarians, geopoliticians, and liberal reformers (generally sympathizing with the latter). While deeply sympathetic with Indian gardens and gardeners, in contrast to nineteenth-century British horticulturalists who regarded Indian gardeners as "slaves of custom,"[76] they were nevertheless bound up with a regime of heritage management in the interests of empire—unity, stability, productivity, legitimacy and, above all, control. The import of this perspective becomes clear in the case study of Villiers-Stuart later in this chapter.

Eurocentric. European travelers from the Mughal period onward reported back to Eurocentric world historians who were prominent then, and are again influential in the

[74] Marshall Hodgson, "In the Center of the Map: Nations See Themselves at the Hub of History," *UNESCO Courier*, 1956, reprinted in Marshall Hodgson, *Rethinking World History: Essays on Europe, Islam and World History,* ed. Edmund Burke III, Cambridge, 1993.

[75] Villiers-Stuart, *Gardens of the Great Mughals*, preface; Havell, "Indian Gardens." See also Partha Mitter, *Much Maligned Monsters: A History of European Reactions to Indian Art,* Chicago, 1992, 270–77.

[76] The expression "slaves of custom" was used in the first volume of the Royal Agri-Horticultural Society in India in 1824.



15. World history perspectives relevant to Mughal garden history

postcolonial era as nationalist perspectives yield to broader "Western" ones. World systems theorists such as Immanuel Wallerstein, for example, classify India and much of the Middle East as "semiperipheral," that is, outside the European "core" of world history from the sixteenth century on.[77]

Islamicate. Hodgson, by contrast, put Persia at the center of the world map from the ninth through sixteenth centuries. He termed this hub the Persianate-Islamicate realm, and by his account it exceeded Europe in institutional, economic, and cultural development.[78] It is sobering to recall that the center of the map in Timurid times lay in places such as Samarqand and Bukhara, where few gardens survive, and also in Herat, Kabul, and Ghazna, where in the wake of current conflicts precious little of anything may survive.

Indian. K. N. Chaudhuri offers a larger scale and more easterly worldview, based on the Indian Ocean, which puts India at the center of a map of world trade and cultural exchange through the eighteenth century.[79] The even broader, multivalent, geographic frame-

[77] Immanuel Wallerstein, *The Modern World-System: Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century,* vol. 1, New York, 1974.

[78] Hodgson, *The Venture of Islam.*

[79] K. N. Chaudhuri, *Asia before Europe: Economy and Civilization of the Indian Ocean from the Rise of Islam to 1750*, Cambridge, 1990.

work of Janet Abu-Lughod reminds world historians that multiple circuits existed in the thirteenth and fourteenth centuries in the world "before European hegemony," and that several of these were centered around Muslim societies and economies.[80]

As noted earlier, there are as yet no Mughal garden histories that reflect a self-consciously Islamicate or Indian perspective on the subject. Instead, the literature on Mughal gardens *from* South Asia tends to combine colonial archaeological methods—empirical, pragmatic, and conserving—with flashes of post-colonial critique, reflection, and concern, but little discussion of the literature emanating from Europe or America, which stands in striking contrast to the literatures of "subaltern studies" and post-colonial cultural and environmental debates.[81]

U.S. The United States constitutes another "center of the map." In contrast to the earlier Anglo-imperial garden historians, however, U.S. garden historians do not discuss their geopolitical situation or interests explicitly, which tends to obscure and displace (but not erase) their perspective. Our research in Pakistan, for example, coincided with the Soviet presence in Afghanistan, large U.S. programs in the region, and funding from the PL-480 Food for Peace program.[82] These historical circumstances had important consequences for Mughal garden history. Based in Pakistan, in a period of Islamicization, our research gave particular attention to hypotheses about "Islamic" dimensions of Mughal garden history.

Similarly, the opening of new Central Asian nations and the closing of Iran, Afghanistan, and other nations to U.S. scholars has deepened our understanding of Timurid vis-à-vis Safavid and other loci of Muslim garden history. If the impacts of "globalization" on cultural heritage, including gardens, are a concern, these American world historical and ideological perspectives and their critics deserve greater attention in the years ahead.

Practical Concern: Villiers-Stuart's *Gardens of the Great Mughals*

These regional and global perspectives underscore the importance of comparative inquiry for understanding Mughal gardens. They also indicate some of the "practical concerns" that are at work in garden history. The final section of this chapter returns to the practical concerns surrounding Mughal gardens—cultural identity, conflict, landscape development, conservation, and landscape design—that were surveyed at the beginning of the paper to show how Mughal garden history combines comparative and practical inquiry.

A full historiographic treatment of this theme lies beyond the scope of this chapter. My aim is to demonstrate that Mughal garden studies arose from the strong practical concerns of early historians, who used (and misused) comparative analysis to advance those concerns. An ideal case comes from the first book published on Mughal gardens, Constance

[80] Janet Abu-Lughod, *Before European Hegemony: The World System, A.D. 1250–1350*, Cambridge, 1989.

[81] Ranajit Guha, ed., *Subaltern Studies: Writings on South Asian History and Society*, New Delhi, 1982–, annual; see also the literature cited in James L. Wescoat Jr., David Faust, and Richa Nagar, "Social and Cultural Geography," in *Encyclopedia of Sociology and Social Anthropology*, New Delhi, in press.

[82] Hussain, Rehman, and Wescoat, eds., *The Mughal Garden*. Cf. Moynihan, *Paradise as a Garden*.

Mary Villiers-Stuart's *Gardens of the Great Mughals* (her subsequent book on Spanish gardens makes frequent comparisons with Mughal gardens).[83]

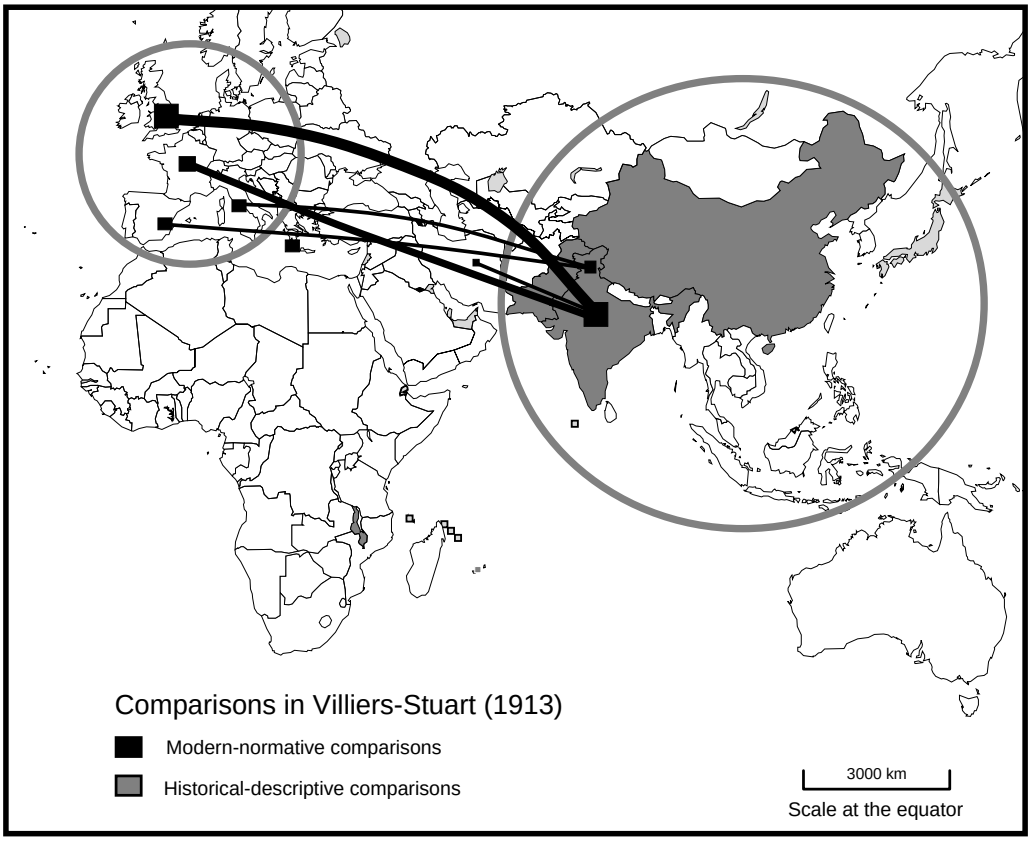
Like many pioneers of a new field, Villiers-Stuart made heavy use of comparisons and analogies to support her argument for greater attention to Mughal gardens.[84] To understand her uses of comparison, it is useful to sort and map them systematically (Fig. 16). The "raw data" run as follows: Villiers-Stuart dedicates her book to "all east and west who love their own gardens." She strives to write for English and Indian readers. In her preface she regrets that Mughal gardens have had limited appeal for English readers, and that gardens are neglected vis-à-vis other aspects of Indian art even though "the Mughal Paradise Garden supplied the leading motive in Mughal decorative art, and still underlies the whole artistic world of the Indian craftsman and builder" (p. viii). Her motive is to examine these cultural functions of gardens and to prepare her arguments in time to "illustrate the bearing of Indian garden-craft on the pressing problem of New Delhi as well as on the larger study of Indian handicrafts" (p. viii). The planning and design of New Delhi were well under way at the time she wrote but had given far less attention to the historical or environmental bases of landscape design than to architecture and urban design. She speaks to issues of climate, color, and symbolism that were being discussed in related building fields in New Delhi, and strives to correct misperceptions of Indian gardens, often by laying blame at the feet of English economic, cultural, and administrative policies that were undermining traditional crafts in India.

These functional concerns had their symbolic, even spiritual counterpart, in the first chapter of the book, where Villiers-Stuart asserted that art is more symbolic in the East than in Europe and that the spirit of Eastern gardens is water while that of Western gardens is plants (pp. 2–3). She found similarities between Mughal and Tudor gardens (the latter "swept away by the sham romanticism of the eighteenth century and . . . the once lauded landscape gardener 'Capability' Brown," p. 20). Mughal public gardens were compared with English almshouses, and contrasted with English parks. Villiers-Stuart decried the Anglo-Indian abandonment of Mughal garden symbolism for plant breeding and horticultural science. The decline of spirituality and advance of modernity in the West were external, but not insignificant, for her project.

Her comparative vision ranges further afield. New Delhi is compared with Isfahan. Kashmiri gardens seem like Italian Baroque gardens, albeit more neglected. "When these Italian gardens are so much admired, photographed, and visited, why are the Mughal baghs of the Indian foot-hills . . . ignored?" (p. 25). Even Chinese and Japanese gardens receive more attention. She draws analogies with French and Dutch garden history, always in an attempt to explain why Indian garden-craft is neglected and in decline (pp. 30–31). Like Havell, her explanations include increased movement via railroads, which enable

[83] Constance Mary Villiers-Stuart, *Spanish Gardens*, London, 1936.

[84] James L. Wescoat Jr., "Varieties of Geographic Comparison in *The Earth Transformed*," *Annals of the Association of American Geographers* 84 (1994), 721–25.



16. Areas of Villiers-Stuart's comparisons between Mughal gardens and other garden traditions

people to travel to climatologically favored hill-stations rather than to design places on the plains to be as favorable as possible. She laments Indian emulation of English garden tastes. And she blames the Mughal emperor Aurangzeb for "banishing Hindu craftsmen from the Moslem court" (p. 267).

Her remedy, indeed her "dream," articulated in chapter 12, is for British clubs, residences, and public grounds to combine English science with Indian symbolism, or rather, a peculiarly imperial conception of Indian symbolism. She believes that garden symbolism goes "to the very root of national life" and that "a love of nature generally, especially of flowers, is as much a national characteristic of the English as of Indians" (pp. 273–74). Her dream of national unity would be fulfilled at the "Delhi of King George," which indicates the importance she attached to gardens and garden history as expressions of the authority and ideology of empire.

She ardently believed that the spiritual meaning and beauty of gardens could foster loyalty among Indian subjects. It is worth quoting her argument at length:

17. Archaeologists, architects, and gardeners working on the restoration of the Wah garden tank, Pakistan

> Ideas of "peaceful domination" or "dignified rule" are but a poor exchange for Indian religious feeling, for the deep traditional reverence of Indians for their Emperor.
>
> The material advantages of our good government—peace, laws justly administered, education, sanitation, hospitals, even the fairyland of European science—leave the mass of India cold.... Here lies the great opportunity of New Delhi, for the motive that can really move and lead India must be a religious one. (pp. 275–76)
>
> .....
>
> If the palace at New Delhi could form part of a scheme with a great Imperial Indian garden, with its symbolic divisions, water-ways, avenues, fountains and walls, Indian art would receive a stimulus and Indian loyalty a lead which it would be impossible to overrate, although hard to believe in England, where the gardens, beautiful as they are, lack the practical use and deeper religious significance of Indian garden-craft. (pp. 279–80)

Those words close the book that launched the field of Mughal garden history. It comes as little surprise that scholars of the post-colonial era do not quote or mention them,

and that they eschew such normative proposals for linking past and present, dominance and submission. Villiers-Stuart opened a Pandora's box of comparative themes, many of them misconceived on factual and other grounds, but some of them deserving critical and constructive attention.

Studies of Mughal gardens, undertaken by designers more often than by classically trained scholars, also emerge from practical and comparative interests. In recent decades those interests seem repressed, unvoiced, or underexamined (Fig. 17). A research project on Kashmiri gardens, for example, would no doubt harbor some hope, however modest, for conservation and conciliation in that embattled region of multiple cultural identities. How can such practical aims be envisioned, articulated, and pursued? As noted at the beginning of this chapter, we lack the theoretical and methodological apparati needed for comparative practical inquiry. Probing conservation projects, linked with further historiographic research on Mughal gardens—from Villiers-Stuart to the present—might illuminate some of the possibilities, and pitfalls, for comparative research, and thereby contribute to a constructive reweaving of scholarly and practical interest in the gardens of the world.