A War of Worlds: Becoming “Early Modern” and the Challenge of Comparison

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Ideas and images have a tendency to double themselves, observes W. J. T. Mitchell in a now-classic introduction, since the very act of seeing is embedded in the word “idea.”¹ This inextricability of ideas and images, so tightly wound together in their depiction, expression and circulation across cultural boundaries, also lies at the heart of any adventure into the realm of comparative early modernities. How does – indeed, can – an idea/image, particularly a marker of modernity, translate across disparate regions and still remain discernible? In exploring this fundamental conundrum, this essay begins with an image that is also an idea: that of the world in early modernity.

One of the most well-known miniature paintings from early seventeenth-century India, now in the Freer Gallery at the Smithsonian, presents an allegorical representation of the fourth Mughal emperor, Jahangir, embracing the Safavid emperor, Shah ‘Abbas (fig.1). The two rulers are located on a partially depicted globe, centered on South Asia, that shows the three continents of the old world in a strikingly contemporary cartographic style. An enormous golden halo, bordered by a crescent from behind which peak out two cherubs, surrounds the figures; Jahangir, standing on a lion, towers majestically over his rival who in turn stands on a lamb and is pictured as diminutive and cowering. This remarkable iconographic scheme, which responds to a specific political conflict, has attracted considerable scholarly attention. Ample commentary has been lavished on the portrait’s European elements, its political message, the map on which the two monarchs stand, the symbolism of the halo.²

² The specific political context for this painting was the dispute between the Mughal and Safavid courts over possession of the frontier region of Kandahar that was eventually captured by Safavid forces in 1622. The studies on this painting are numerous: see especially, Sumathi Ramaswamy, “Conceit of the Globe in Mughal Visual Practice,” Comparative Studies in Society and History 49, no. 4 (2007): 751-782; Milo Cleveland Beach, The Imperial Image: Paintings for the Mughal Court (Washington, D.C: Freer Gallery of Art, 1981); Ebba Koch, Mughal Art and Imperial Ideology: Collected Essays (New York: Oxford University Press, 2001); Stuart Cary
But more important, for the purposes of this essay, this image has also become an emblem for theoretical and historiographic debates over questions of comparison in early modern studies.

The painting is clearly an aesthetic hybrid, mixing traditional elements of Persian miniatures with those of European Renaissance painting, which had been introduced to the Mughal court in the 1580s and 1590s by the Jesuits. But what exactly such aesthetic hybridity reveals about the political and symbolic relations between the Mughals and the Europeans is far from clear. Among various factors, we must consider whether Mughal painters simply appropriate exotic, novel techniques from European exemplars – or whether this painting presents an early instance of the insidious Europeanization of Asian societies that would become hegemonic under colonialism. Does the Mughal mimicking of European style suggest inferiority, superior disdain, innovative openness, or a cultural curiosity that is also present in European appropriations of Eastern styles in the same period? What set of ideas does this image conceal and display simultaneously?

The dilemma, at once ideological and methodological, cuts to the heart of several matters that this volume, and the conference it emerges from, seek to address. Only by addressing the questions of comparison and commensurability inherent in hybrid productions can we begin to speak of “early modernity” in terms that are not limited to Western Europe. In fact, the challenge of scholarship on “comparative early modernities” in a new millennium demands that we approach the very idea of early modernity in a comparative framework free of Eurocentric assumptions – and yet, the challenge of doing so remains daunting. The new scholarly interest in globalism and world history complicates the task further, forcing a necessary critical self-consciousness about the differences, as well as the similarities, between a ‘globalizing’ early modern world and our own.

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An analysis of “Jahangir embracing Shah ‘Abbas,” and the historiographic narratives surrounding it, foregrounds these concerns. Three distinct early modern cultures interact within the same iconographic frame, so that the rhetoric of cultural juxtaposition within the image manifests Jahangir’s name (“world-seizer”), while the use of the map underlines the emperor’s global ambitions. Moreover, the various symbols (lion, lamb, world map, cherubs, halo) point to a complex layering of multiple systems of knowledge and power that cut across cultural difference and work in conjunction to reinforce the authority of the Mughal emperor versus his Safavid rival.

Unsurprisingly then, one reliable approach to this, and other such Mughal miniatures, has been the study of the Mughal atelier’s engagement with European styles of pictorial representation and political allegory. Such comparative studies have situated themselves within various theoretical frameworks, ranging from art historical studies based primarily on considerations of influence and innovation, to postcolonial meditations that emphasize markers of difference, while critiquing assertions of universality, and itineraries of “connected histories,” which identify networks of circulation between cultures, resulting in what Sanjay Subrahmanyam calls the “production of commensurability.”

However, in contrast to these fundamentally comparativist approaches, I’d like to propose a somewhat different model and suggest an alternate tactic: how does our understanding of this image change, if we focus on the larger problem of imagining and representing the idea of “the world” from the different spatial and cultural vantage points depicted within its frame? More generally, is it possible to speak of a distinctly “early modern” notion of “world”? What might that idea look like?

The Challenge: Imagining Modernities

“Jahangir embracing Shah ‘Abbas,” has been described as “one of the greatest political pictures from any culture,” and it is clearly an assertion of power. It is also, quite explicitly, an assertion of a particular conception of the world, given the strategic use of the world-map on which Jahangir and Shah ‘Abbas stand. Indeed, the

6 It is worth noting that this painting appears to be part of a series produced at the Jahangiri court. Similar paintings, which depict globes or maps, include “Jahangir on a Globe” (now in the Los Angeles County Museum
map, which appears to be part of a globe, has recently attracted critical attention from quite different directions—
from the perspective of a history of cartography as well as a postcolonial critique of a Eurocentric cartographic
discourse.7 Painted about 1618 by Abu’l Hasan (Nadir al-Zaman), this depiction of a world centered on South
Asia is indebted to the so-called cartographic revolution in sixteenth-century Europe. The outlines of the
continents echo Ortelius’s famous world map and owe more to Mercator than to Ptolemy or traditional Islamic
cartography.8 At the same time, even though the overall contours of the map are of European inspiration, “within
the area of India, the delineation of rivers looks intriguingly distinctive” and “appear to be more accurately
aligned than on roughly contemporaneous European maps.”9

This hybrid depiction of distinct kinds of cartographic knowledge within the painting’s frame is striking
not least because in the early seventeenth century world maps and globes are thought to have been a rarity in
India. Though Joseph Schwartzberg speculates that Abu’l Hasan must have had access to Mughal maps of the
empire that are now lost to us, there is very little documentary trace of a vibrant cartographic “revolution” in
South Asia in the sixteenth and seventeenth century.10 In fact, the very paucity of the indigenous cartographic
archive is striking. There is, however, substantial evidence, though mostly from European accounts, to suggest

7 See Ramaswamy, “Conceit” and Joseph E. Schwartzberg, “Geographical Mapping,” in Cartography in the
Traditional Islamic and South Asian Societies, ed. J. B. Harley and David Woodward, vol. 2, The History of
series will hereafter be cited as HC followed by volume and page numbers.
8 See Schwartzberg, “Geographical Mapping,” who argues that “there can be no question that the general
shapes…indicated on the globe…derive from European maps,” noting for instance that the northern shore of the
Arabian Sea bears a striking resemblance to Hondius’s Magni Mongolis Imperium of 1625 (409).
10 For authoritative overviews, see Joseph E. Schwartzberg, “Introduction to South Asian Cartography,” in HC 2:
295-331; and Irfan Habib, “Cartography in Mughal India,” Indian Archive 28 (1979): 88-105.
that maps, globes and cartographic representations of various kinds, were sought after at the Mughal court and were recommended gifts from ambassadors and traders seeking favor.\(^\text{11}\)

Given this context of seeming technological asymmetry, the implications of a European symbol – the globe or world map – migrating into a Mughal painting need to be carefully considered. Is Jahangir’s use of the globe motif a sign of the Emperor writing back, rejecting a Eurocentric portrayal of the world and redeploying this most European of images towards his own imperial self-fashioning?\(^\text{12}\) Does the globe have a fundamentally different meaning within a Mughal frame than it does in a European one?

It has been suggested that the Mughal emperor plucks this symbol of European imperial and commercial dominion out of its Western context and redeployes it to assert the sanctity of transcendent, spiritual rule.\(^\text{13}\) In this view, the Mughal appropriation of the globe seems to become the very antithesis of its European signification: the globe is endowed with a religious significance and is incorporated into the iconography of Sufi-sanctioned kingship. Thus, Sumathi Ramaswamy traces a dichotomy between Western European and Eastern Mughal uses of the globe, by suggesting that contrary to European worldliness, the terrestrial globe in Mughal art “is mobilized… to represent the constitutive role of the atemporal and the transcendent…the ‘geometric rationalization of space’ that modern scientific cartography was beginning to inaugurate in the West around the same time is magnificently countermanded by such an enchanted imagery in which a very different kind of dominion is asserted.”\(^\text{14}\) The

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\(^{11}\) The most famous account of the Mughal desire for maps is Sir Thomas Roe’s narrative of his embassy to Jahangir’s court from 1615-1619 (see *The Embassy of Sir Thomas Roe to India, 1615-19*, ed. William Foster (Munshiram Manoharlal Publishers, 1990), 380; for other occasions when maps were gifted to the Emperor, see 44-45, 84). Roe’s account is corroborated by his chaplain, Edward Terry (notes to 382-83). For a discussion of European accounts of Indian mapping, see Schwartzberg, “Introduction to South Asian Cartography,” 324-27 and Ahsan Jan Qaisar, *The Indian Response to European Technology and Culture, (A.D. 1498-1707)* (Delhi: Oxford University Press, 1982), 36-37, 148; Habib, “Cartography,” 94; and Milo Cleveland Beach and Ebba Koch, *King of the World: The Padshahnama: An Imperial Mughal Manuscript from the Royal Library, Windsor Castle* (London: Thames & Hudson, 1997), 139.


\(^{13}\) Ramaswamy, “Conceit,” 772-9.

\(^{14}\) Ramaswamy, “Conceit of the Globe in Mughal Visual Practice.” 776, 778. It should be noted though that the pictorial assertion of Jahangir’s imperial power is very legible across cultures: as Ramaswamy herself, like many commentators before her, notes, “the Mughal emperor advances hegemonic claims, albeit unsuccessfully, over his rival Safavid’s territory…the lion on which he stands sprawls across a good part of Persia…as well as…Central Asia…the Safavid’s vast empire is reduced to some paltry territories around the Mediterranean” (755). Such pictorial symbolism is familiar in European Renaissance painting as well – see, for instance, Jerry Brotton,
“enchanted imagery” in question is the allegory of cosmic harmony signified by the lion and the lamb, a characteristic trope known as dad-o-daam imagery in which imperial artists depicted a ferocious beast of prey (dad) -- such as the lion here -- lying down with its potential victim (daam) -- here the lamb. The globe thus becomes part of an allegory symbolizing the metaphysical (rather than merely political) power of a universal ruler who reverses the laws of nature and brings the oppressor and oppressed into harmony, as in a Golden Age.  

Such an analysis of the Mughal globe as predominantly spiritual, otherworldly, religious and allegorical, raises several troubling questions. Most obviously, it insists on a fundamental difference – an incommensurability – between Mughal and European iconographies of the globe, and by extension, ideas of the world. While European cartography is associated with a modern, scientific, commercial and colonial epistemology, in the Mughal context, these associations must be subverted and redeployed into a radically different knowledge-system that emphasizes religion, spirituality and transcendental monarchy.

Unfortunately, such a dichotomy betrays a familiar undercurrent, a classic tale of modernity: Weber’s disenchantment of the world under the harsh scrutiny of scientific rationalism. It develops a narrative based on a now-common historiography that pits an older (medieval) world of vivid imaginations, magical correspondence, and religious belief against the unyielding juggernaut of modernity driven by empirical demonstration, economic realpolitik, and agnostic skepticism. On such an account, non-European polities, with their firmly medieval metaphysics and world-views, are doomed to be excluded from a narrative of modernity, or even early modernity, until the advent of colonial institutions and influence; they remain forever pre-modern, exhibiting a radical alterity that can only be violently assimilated into modernity by colonialism.  

16 The persistence of this perspective and its on-going historiographic importance was underlined at the conference in Jack Goldstone’s strongly argued presentation that the modern trajectory taken by Western Europe owed much to the scientific revolution, a unique

\*Trading territories* (Cornell University Press, 1998). The connection between European and Mughal iconographies of power has been attributed to the influence of European painting on Mughal art: see note 3 above.  

15 This trope is discussed extensively in Koch, *Mughal Art*, 116-29; see also Bamber Gascoigne, *Great Moguls*. As Koch notes, this imagery is derived from the illustrated Royal Polyglot Bible (the Biblia Regia (Antwerp, 1569-72)); what she does not note is the bible’s unusual incorporation of a range of biblical maps.

16 This is of course a version of the “great divergence” thesis; Kapil Raj eloquently summarizes and critiques this model, particularly with regard to the historiography of science: see Kapil Raj, *Relocating Modern Science: Circulation and the Construction of Knowledge in South Asia and Europe, 1650-1900* (Palgrave Macmillan, 2009), 5-10.
phenomenon that did not occur in other cultural contexts where traditional knowledge-systems continued to dominate.\textsuperscript{17} Such debates about the rise of the West have, of course, been central to recent studies in world history, and though multicultural critiques of Eurocentric historiographies have begun to emerge, the effect of such macro-historical narratives remains powerful.\textsuperscript{18}

But there are signs that such positions are increasingly under attack.\textsuperscript{19} Without excusing the complicity of colonialism with narratives of modernity, it is surely possible to investigate whether Mughal and European concepts of the world and of world-order, as they emerge in cartographic representations, were indeed so deeply at odds.\textsuperscript{20} It is time, perhaps, to complicate the dichotomy of European and non-European, modern and pre-modern, worldly and spiritual, and to suggest some points of contact between European and Mughal uses of the world in conceptual and iconographic terms. More importantly, perhaps, it is time to challenge the Weberian account of modernity on which such dichotomies are predicated: imagining the world and incorporating it into the rhetoric of power, as both Mughals and Europeans did, required an understanding of the enchantments of modernity, of the power of rhetorical suggestion and geographic poiesis.\textsuperscript{21} As this essay will argue, the emergence of a discernible “early modernity” may not have been inherently antithetical to traditional metaphysics, systems of belief and imagination. On the contrary, the transition to modernity may have depended strongly on a successful

\begin{itemize}
\item \textsuperscript{19} See most recently, Raj, Relocating Modern Science, who draws on the pioneering work of Sanjay Subrahmanyan (see for instance, Explorations in Connected History: From the Tagus to the Ganges (Oxford: Oxford University Press, 2005)).
\item \textsuperscript{20} It must be acknowledged at the outset that such a project is inherently fraught with political and ideological difficulties; see for instance the critique posed by Walter Mignolo in The Darker Side of the Renaissance: Literacy, Territoriality, and Colonization (Ann Arbor: University of Michigan Press, 1995), and “Coloniality at Large: Knowledge at the Late Stage of the Modern/Colonial World System,” Journal of Iberian and Latin American Studies 5, no. 2 (1999): 1-10.
\item \textsuperscript{21} On the significance of rhetoric, poeisis and imaginative belief in the making and analysis of maps, see Christian Jacob, L’empire des cartes: approche théorique de la cartographie à travers l’histoire (Paris: Albin Michel, 1992), and “Quand les cartes reflechissent,” Espaces temps 62-63 (1996): 36-49.
\end{itemize}
assimilation of new knowledges to the old structures of understanding, in both European and non-European contexts. The modern invention of the world, I want to suggest, took place in quite different places and in quite different ways, but the epistemological impulse behind this process may have been surprisingly similar across early modern cultures.

The stakes of such an argument are of considerable significance. At the outset, it suggests a different basis for comparison between European and non-European cultures in early modernity. Rather than asking the question, “Why Europe?” it seeks to shift focus away from comparative accountings of relative cultural progress towards a clearly defined ideal modernity, and instead, to suggest that we look for changes in key ideas/images across cultures that may serve as markers for a more fluid, flexible model of modernity understood in intellectual and cultural (and not only economic) terms. The concept of “the world” is but one instance of what such a study might look like. Moreover, to argue for a basis of commensurability across European and non-European ideas/images is to challenge us to rethink the politicized relationships between “scientific” and “spiritual” knowledge and “imperial” and “transcendental” power. As a consequence, we perhaps need to question the conventional narrative of secularization and rethink the place of religion in the making of the modern world.

Worldmaking and Early Modernity

As both a potent idea and image, “the world” occupies a crucial position in early modern culture. It is at the heart of the so-called “epistemological shift” associated with the advent of modernity, which may even be defined as the moment when a new idea of “the world” and of world-order comes to be constructed and established. But to identify the idea of a changing world with notions of modernity and early modernity is also to open a precise set of interpretive questions: we must ask just who was imagining the world, for whom and for what. What are the products of early modern world-making and who are their consumers? Is the re-conception of the world a European phenomenon, whose products were exported along with imperialism and colonialism? Or were there simultaneous, different versions of world-making taking place across global spaces? Objects such as

“Jahangir embracing Shah ‘Abbas’ exemplify these issues and present quite complex ‘test cases’ for any theoretical understanding of the relations between empires, polities, cultures or knowledges across the globe.

The possible political implications of such a study are however potentially troubling. As postcolonial critics have alerted us, tracing the re-definition of an over-arching conceptual field such as ‘the world’ hints of the subtle extension of an insidious Eurocentrism and the suspicious Enlightenment project of universalism with its modern avatar of globalization. And yet, one of the characteristics of early modernity that historians of both Europe and Asia agree on, however tenuously, is the opening up of the world to global trade and to various networks of circulation that forced a geographic redefinition of unprecedented scope – a change, which whether in Europe or Asia, implied a new idea of the world. It seems imperative then that we understand what exactly this concept of “world” signified within the period, and how it was imagined, re-imagined and shaped according to various interests. If early modernity is indeed characterized by a new idea of the world, and that modernity can be separated – indeed must be separated – from ‘westernization,’ then we must examine how different polities in the early modern world imagined that totality. Ironically, even visions of the whole are bound by the specificity of place, and we must therefore investigate whether and how ideas of world-order may have circulated along with people and goods. To trace the circulation of ideas, symbols and systems of order across cultural and territorial frontiers might enable us to differentiate more subtly between métissage, appropriation and hegemonic acculturation based on such ideological constructs as the “world” itself.

“Jahangir embracing Shah ‘Abbas’ provides a particularly useful case-study because its iconographic scheme and ideological purpose depend in important ways on a cartographic representation – a specialized, powerfully mediated vision of the world. The discourse of cartography has become practically synonymous with world-making (and its discontents), since its primary product, the map, is a visual representation of the world, an emblem of totality. Mapping, especially using the Mercator projection, has also become emblematic of the great


shift towards modernity and universalism: the world-map in particular offers a simultaneous view of the whole, complete mastery through the single gaze. When Abu’l Hasan incorporates a European-style world-map into a painting that compliments imperial Mughal majesty, he is consciously drawing on this rhetoric, which he recognizes as transcending the partiality of a particular location to celebrate the ideal of the totality.

However, contemporary critical emphasis on the various “revolutionary” aspects of early modern European cartography – its break with the old Ptolemaic oikoumene based on three continents with fabulous monsters lurking in the margins; its foundation in mathematics and geometry; its opening up the possibility for more efficient navigation by sea and hence, the prospect of greater trade between different parts of the world; and its expression of the conquest and domination of the world by human ingenuity and intellect – hides another story that may have been more legible to a sophisticated early modern painter or ruler. Far from representing a move away from a theocentric cosmology to a secular, scientific, imperial system, European cartography in the sixteenth century drew inspiration from and remained bound to the theological framework of the cosmography. Because of its explicit interest in re-creating the world – visually, philosophically, and politically – world-making forced early modern thinkers to confront complex theological and metaphysical dilemmas, as their own act of intellectual creation and ordering seemed to parallel and rival God’s original creation of the world. To imagine or depict the world in early modernity was thus to express something more profound than a desire for imperial and commercial dominion: world-making was nothing less than establishing an ideal of world-order, understood in metaphysical, scientific, theological and eventually, in political, terms.

25 The politics of the Mercator projection, and of Mercator’s Atlas, have been widely discussed: see especially, Mark S. Monmonier, Rhumb Lines and Map Wars (University of Chicago Press, 2004); and Brotton, Trading territories, 161-69.
26 Harbans Mukhia identifies this interest in universals and totalities as an innate part of Mughal culture, noting of the use of the globe in royal portraits that, “Being the world’s symbolic pivot provided them with more than a personal thrill; it gave meaning to their dream of universality, order and eternity” (Harbans Mukhia, The Mughals of India (London: Wiley-Blackwell, 2004), 86.
27 For a discussion of this point with specific regard to mapping, see Frank Lestringant, Mapping the Renaissance World: The Geographical Imagination in the Age of Discovery (Berkeley: University of California Press, 1994).
28 Denis Cosgrove’s much-cited comment about the “implicitly imperial” gaze engendered by the world map, and J. B. Harley’s compelling Foucauldian readings of maps have done much to focus analyses of early modern maps on their political ambitions, often to the neglect of other dimensions of cartographic ideology (see Denis Cosgrove, Apollo’s Eye: A Cartographic Genealogy of The Earth in the Western Imagination (Baltimore: Johns Hopkins University Press, 2001); and J. B. Harley, “Maps, Knowledge and Power,” in The Iconography of
To speak of early modern cartography or “cartographic representation” is thus anachronistic. The word “cartography” is a nineteenth-century invention and was never used in the sixteenth century (OED). We hear instead of *cosmography* – literally “writing about the cosmos” – a field of study, but also a particular genre of book, which took the publishing industry by storm. Cosmography in sixteenth century Europe represents a moment of grand synthesis but also of valiant, pioneering reconstruction. Seeking to combine all knowledge of the world into a single book, it claimed to be a science of the world. It encompassed both the terrestrial and celestial spheres, and initiated an immense project of collection and organization both visual and textual. As a discipline, it grew out of medieval encyclopedias and *compendiae* such as the *Etymologiae* of Isidore of Seville, but it gained a new form with the rediscovery of Ptolemy’s *Geography* and Pomponius Mela’s *De situ orbis*. Thus, in practice, it took on a dual structure consisting of visual maps and a narration of collected histories organized according to the continents. A world map, however, could also be a cosmography if it contained sufficient discursive information within the frame, or was related to a text. A famous instance is Martin Waldseemüller’s *Universalis Cosmographia Secundum Pholomaei Traditionem et Americi Vespucii Aliorumque Lustrationes* (1507), the first world map to depict the Americas and a clearly defined Pacific that was printed in conjunction with his book, *Cosmographiae Introductio* (1507), that in turn offers a textual account of the world and the new discoveries following the Vespucci expeditions.

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*Landscape: Essays on the Symbolic Representation, Design, and Use of Past Environments* (Cambridge: Cambridge University Press, 1988), 277-312.). However, in his pioneering study, Cosgrove also points to what these “other dimensions” might be: “metaphysical speculation, religious aspiration, or poetic sentiment” (5). This is not to suggest, of course, that we should simply ignore the complicity of the cartographic project in the imperial agendas of European powers; simply that we broaden the field of analysis to account for other potential markers of modernity.


The flexibility of the term, which refers both to a particular kind of visual image as well as a mammoth book of written texts, reminds us that the word *mappa*, from where we get “map,” referred interchangeably to either text or image in the Latin middle ages, and this meaning seems to have continued into the sixteenth and seventeenth centuries. This elision of image into text and vice versa, such that both map and book could be a “cosmography,” points to a crucial continuum between visual and verbal representations of the world as a concept. The map was thus inextricable from the larger project of writing, containing and thus shaping the world.

Significantly, this development of the cosmographic genre is not limited to early modern Europe. The prominence of a textual environment for maps is also found within the Indo-Islamic tradition, where so-called “pre-modern” maps (and by this scholars usually mean those predating European influence) are typically found within larger manuscripts. Islamic science contained a rich tradition of cosmological and geographic writing, often producing a combined “cosmographic” literature that was based on philosophical/ scientific foundations as much as on Gnostic or mystic perspectives. As in Europe, Ptolemy is a towering figure in the Indo-Islamic tradition, though his place within the astronomical, mathematical and geographic sciences is quite different in the Muslim context, and strongly affected by Persian and Indic influences.

By the early seventeenth century, sophisticated celestial globes made of seamless metal were being produced in Lahore, and despite the paucity of documentation, there is little reason to think that maps, globes and cosmographies were an utter novelty when they were presented at the Mughal courts in the late sixteenth and seventeenth centuries. What may have attracted so much attention at the courts of Akbar and Jahangir was the radically different mode of terrestrial and celestial representation used in European maps, even though the

32 The scholarship is succinctly summarized in Ahmet T. Karamustafa, “Introduction to Islamic Maps,” in HC 2: 3-11.
33 For useful overviews, see Ahmet T. Karamustafa, “Cosmographical Diagrams,” in HC 2: 71-89; Joseph E. Schwartzberg, “Cosmographical Mapping,” in HC 2: 332-387. I refer to “Islamic science” in this generalized way for the sake of brevity, though it should be noted that the indigenous traditions stretching from North Africa to India were quite distinct.
mathematic bases for the European projections would have probably been comprehensible: the quite rapid adoption of the new European maps in the Ottoman world suggests as much.\textsuperscript{35} What is clear, however, is that the technological backwardness often implicitly attributed to early modern Islamic science is simply not true; the curiosity for new cartographic instruments and representations in the Ottoman, Safavid and Mughal contexts may in fact suggest growing interest in the idea of “world,” grounded on a well-established, distinctive tradition of Islamic philosophy, science and metaphysics.\textsuperscript{36}

In both cases then, the revival of cosmographic thinking with its immense scale and synthetic mode of representation reflects a wider early modern desire to comprehend the principle and totality of world-order. Ironically, however, one of the most striking aspects of the comparative cartographic knowledges of Europe and Mughal India, is the difference in contemporary historiographic approaches to scholarly reconstruction in each field. Unlike the historiography of European cartography, which has strongly emphasized the modern characteristics of early modern cosmographies (that is, their interests in geometry, commerce and imperial ambition) at the expense of other features, historiographies of Indo-Islamic cartography have persisted in characterizing their cosmographies as definitively “pre-modern.” In this case, “modern” seems synonymous with the use of the Ptolemaic grid, Euclidean geometry, and the apparently temporal focus of European cartographic ventures, while “pre-modern” signifies a primarily metaphysical, theological or spiritual matrix into which the map must be inserted. The problem here, as Kapil Raj notes, is not merely created by the archive, but by the historiography of science itself, deeply implicated as it is in narratives of modernity: “We are then presented with the following dilemma. Are we to understand modern science purely as an emanation out of West Europe, constituting the Great Divide between the West and the Rest, and reaching non-European peoples only as they

come into contact with Europeans and capitalism? Or are we to think solely in terms of competing national narratives claiming precedence in scientific reasoning from their respective societies?37

Sacred Geographies

It is precisely in order to counteract some of the effects of this crux and consider more complex lines of continuity and engagement across cultures, that it is crucial to emphasize the link between Europe’s own “medieval” and “modern” histories. Despite the appearance of a radical break, one of the important continuities between medieval and early modern mapping, in both European and non-European contexts, is the continued sacred function of maps inherent in the idea of a “cosmography.” In the Islamic context, the lack of a comprehensive cosmology in the Qur’an encouraged the development of independent cosmological traditions rooted in theological concerns.38 However, while these theological foundations of Indo-Islamic cartography have been well-established, the analogous situation in Europe remains under-emphasized.39

Like the natural philosophers, European cosmographers tended to follow St Paul’s dictum that individuals reach a superior intelligence through the contemplation of nature. Thus, to study a map and its inherent allegories in early modern Europe was to discover the marvel of creation and the sublime order of the world. Even when the world is subject to a mathematical graticule, the fact of measure, proportion, and calculation belongs to an invisible and even higher order of things. The classic formulation of this doctrine, which is echoed repeatedly in European accounts, is in Roger Bacon’s Opus Maius, completed in 1267. Here Bacon asserts the centrality of geography to scriptural exegesis: “The whole Bible,” he writes, “is full of geographical passages, and nothing can be learned about the text unless we first study these passages. The whole course of Scripture is governed by the

37 Raj, Relocating Modern Science, 5.
regions, cities, deserts, mountains, seas, and other sorts of terrain…if, I say, he knows all these, he will be able to grasp and delight in the pure and literal sense of the scriptures, and be able to advance with pride and confidence to their spiritual meaning.” The world, in this view, is a giant palimpsest inscribed with the divine plan; to read the world is to understand the will of God.

European cartography from the ninth to the seventeenth century thus overtly mobilizes Christian ideology, promoting readings of the "book of the world" that are intended to assure the viewer that nature reflects the genius of creation. This idea of a geographia sacra, a sacred geography, considered the map as an aid to contemplation, used to apprehend divine intervention in the phenomenal world. This is the explicit purpose of the cartographic program in the Biblia Regia (the Antwerp Royal Polyglot Bible), presented to Akbar by the Jesuits. Unfortunately, however, studies of maps and religion in the early modern world have been largely confined to explicitly biblical maps or those that overtly depict ecclesiastical power. While it is true that the sheer number of maps of the Holy Land produced in this period make it the most popular region to be depicted, almost as many maps of the Holy Land were made as world maps – a fact that forces us to confront the theological dimensions of the cosmographic project.

For the shift from partial chorography to global cosmography involved an alternate epistemology. The displacement of one’s point of view upward involved an imaginative elevation to the point of grasping

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41 Lestringant, Mapping; Watts, “The European Religious Worldview and Its Influence on Mapping” 397-98; and Denis E. Cosgrove, Geographical Imagination and the Authority of Images (Franz Steiner Verlag, 2006), 17-18.

42 See for instance Catherine Delano-Smith and Elizabeth Morley Ingram, Maps in Bibles, 1500-1600 (Geneva: Droz, 1991); Francesca Fiorani, The Marvel of Maps (New Haven: Yale University Press, 2005); Kenneth Nebenzahl, Maps of the Holy Land (New York: Abbeville Press, 1986). Significantly, most mapmakers in the sixteenth and seventeenth centuries appear to have had Reformist leanings: it is a surprising and striking fact that the use of maps and their production seems more firmly associated with Protestant regions than with Catholic ones. Delano Smith and Ingram’s study of maps in Bibles decisively shows that this practice was a Reformist one, as maps began to appear in Bibles in the 1520s, coinciding with Luther’s break from the Catholic Church. It is now believed that the great cycle of maps in the Vatican Galleria may in fact be a post-Tridentine response to the widespread Protestant use of maps in the service of religious contemplation.

instantaneously the entire convexity of the globe. At that point, “the eye of the cosmographer ideally coincided with that of the creator.” There is, in fact, an important and repeated insistence throughout the sixteenth century on the relationship between cosmography and theology as an expression of the analogy between human and divine world-making. The frontispiece intended for André Thevet’s Grand Insulaire (ca. 1586) (fig. 2), a cosmographic collection on islands, for instance, shows the author holding a compass poised over a globe. The image finds a divine counterpart in the preface to the Cosmographie universelle, published ten years before in 1575, where Thevet describes God as holding the world in his hands and turning it between two or three fingers. Acutely aware of the parallel between himself and the Creator, Thevet qualifies this connection at some length in the preface:

This discipline of Cosmography, therefore, serves to reveal the vanity of that with which we stop ourselves; then, bending our pride, it directs our mind towards that which is great and no longer permits it [our mind] to stop itself over trivialities. And for this reason I think that there is no science, after Theology, that has a greater virtue in making us understand grandeur and divine power, and to hold these in admiration, than this one [i.e. Cosmography].

This topos of doubling of theology and cosmology, creator and cosmographer, is also evident in the iconography of Mercator’s Atlas: while the frontispiece depicts a heroic classical figure, who appears to be both creator and guardian of the world in his hands, the first full image of the volume is a portrait of Mercator that is very similar to that of Thevet (fig. 3); he too holds a compass poised over a globe. The pose in fact is reproduced for a range of

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44 Lestringant, Mapping, 5.
45 “… ce que le saint Esprit nous vouloit faire entendre, nous admonneste & enseigne de regarder la grande magnificence de cest univers, lequel encore qu’il soit trouvé admirable, toutesfois il n’est rien au pris de l’aucteur, qui a les mains si grandes, qu’en une il contient tout le monde, & entre deux ou trios doigts il tourne toute la terre.” André Thevet, La cosmographie universelle (Paris, 1575), a iv.
46 “Ceste discipline Cosmographique donques sert pour descouvrir la vanité de ce en quoy nous nous arrestons, puis abaissant nostre orgeuil, elle adresse nostre esprit à ce qui est grand, & ne le permeta plus s’arrester à ce qui n’est rien. Et pour ceste cause ie pense qu’il n’y a science, après la Theologie, qui ayt plus grande vertu de nous faire cognoistre la grandeur & puissance divine, & l’avoir en admiration que celle la.” Thevet, La cosmographie, a iv’-a v’.
figures in the period, from Ptolemy to Hondius. A subsequent image in the *Atlas*, first used in the 1613 edition, shows a doubled version of the same *topos* as Mercator sits beside the printer Hondius and both hover over globes within an expanded cartouche (fig. 4).

Too often, these images have been reduced to expressions of conquest – whether intellectual dominion of the natural world, or political dominion of vast expanses of territory in the name of empire. They are also, however, images of reflection: Mercator’s title for his most famous book is quite specific about its purpose: *Atlas sive Cosmographicae meditationes de fabrica mvndi et fabricati figvra* – “Atlas or Cosmographical Meditations on the Creation of the World and all the things Created.” The crucial shift of terminology from “cosmography” to “cosmographical meditation” deserves greater attention as it signals the complex status of maps as philosophically challenging models of the world, but also as unique instruments for divine contemplation.47

There is little doubt that such images negotiate a position between two extremes. At once a celebration of scientific progress and the human intellect, they also seek to mimic God, the Original Maker, with appropriate deference. The mapmaker merely re-creates and re-presents that first world originally produced through divine creative power. At once an assertion of mastery, maps are also tentative responses to a shifting world – asserting the stability of (a divine) order to counteract the uncertainty of partial knowledge. Ortelius’s well-known *Typus Orbis Terrarum* is a case in point (fig. 5). Though the image has become an authoritative image of early modern European claims to dominion and scientific advancement, it also undercuts such claims: the Latin inscriptions within the map’s frame are neo-Stoic quotations from Seneca and Cicero that celebrate the contemplation of the world, while mocking the human obsession with territorial boundaries.48 “Is this the pin-point which is divided by sword and fire among so many nations? How ridiculous are the boundaries of mortals,” declares the top right

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47 A recent, probing discussion of this issue is offered by the diverse essays in Lestringant, *Les meditations cosmographiques.*

hand quotation from Seneca.\textsuperscript{49} The map itself prominently highlights its own lack of certain knowledge about the 
Terra australis nondum cognita, the austral land that is “not yet known.”

A similar, even more striking instance is the neglected prose hexameron that precedes the maps in Mercator’s Atlas. Mercator undertook and completed this treatise on the Creation, known as “De Mundi Creatione ac Fabrica” (“On the Creation and Fashioning of the World”) in the final years of his life, considering it his greatest achievement. In a letter from 1583, he writes, “Although this is the last part of my work, it will nonetheless be the most important, indeed the very base and summit of the whole…This will be the goal of my labor, this will mark the end of my work.”\textsuperscript{50} The significance of “De mundi creatione,” however, lies in its generic fluidity and its unique position within an atlas. Despite the theological pretensions of other geographers, no one had presumed to write a treatise on Genesis and incorporate it into a cosmography. To do so was to argue that the “new science” of maps was still subordinate to theological and transcendental concerns, closer to metaphysics than to politics.

Both Ortelius and Mercator, those two exemplars of European scientific modernity, clearly resist an iconography of the globe as primarily imperial, no more than an instrument and expression of temporal power, and both actively seek to re-inscribe the cosmographic project of mapping the world within a philosophic and spiritual frame. A careful look at the world map of Mercator, for instance, suggests how this iconic image of the modern world is firmly embedded within a densely-populated allegorical scaffolding. In Hondius’s version of Mercator’s map, Nova totius terrarum orbis (1633), busts of distinguished cartographers look down on the mapped world from neat oval frames, while allegorical emblems of the four elements surround the double hemispheric view, as though embedding the cartographic representation in a scientific as well as mythic matrix.

Such a perspective on European cosmographic world maps suggests a quite different assessment of globe’s presence in Mughal miniature paintings from the early seventeenth century. The maps of both Ortelius and Mercator were well-known to the Mughal court: the first Jesuit embassy to the court of Akbar had presented the emperor with Ortelius’s Theatrum orbis terrarum, which evidently became an imperial favorite; while

\textsuperscript{49} Seneca, Naturalium Quaestitionum 1, Pref. 7-11.
\textsuperscript{50} Letter of 24 March 1583 to Heresbach, in Maurice Van Durme, Correspondence Mercatorienne (Antwerp: Nederlandsche Boekhandel, 1959), 183-84.
Thomas Roe, the English ambassador to Akbar’s son and successor, Jahangir, presented the latest edition of Mercator’s *Atlas* to the emperor in 1617. Consequently, despite the suggestion that the Jahangiri allegorical paintings featuring globes might derive from allegorical English paintings, such as the Ditchley portrait of Elizabeth standing on a world map, it is more likely that Mughal observers became skilled readers of world maps as complex allegories in themselves. While in the European maps the association of globe and mapmaker only implicitly evokes the analogy with the Creator’s control of the world, Jahangiri allegorical paintings explicitly harness the rhetorical suggestiveness of this analogy to enhance the emperor’s power. In “Jahangir embracing Shah ‘Abbas,” the emperor’s power over the lion and lamb is divine, as is his position above the globe; it is this *divine* analogy that gives him political authority over his Safavid rival.

Another fascinating instance of this trope is pair of allegorical paintings, attributed to Abu’l Hasan (fig. 6, 7) Here, Jahangir stands on a globe, which in turn is supported by an ox that stands a fish, while the related painting repeats the image, omitting the ox.\(^{51}\) The iconography here derives from classical Islamic cosmology, and an inscription on the painting explains: “Through the divine felicity of the Divine Shadow’s coming, the earth is raised up on the Fish-bull.”\(^{52}\) The analogy between God’s creation of the world, and the emperor’s maintenance of the stability of the world is clear. Likewise, the inscription over the emperor’s head in the second painting suggests another divine analogy, one that connects moral virtue and divine power: “Blessed portrait of His Supreme Majesty who dispatches his eager shafts into Poverty and who, through his rectitude and fairness, is laying new foundations for the world.”\(^{53}\)

The similarity between Jahangir’s invocation of cosmographic rhetoric in these images and the European conception of a theologically grounded cosmography should be evident by now. Both understand the iconography of the globe in metaphysical as well as political terms and use it as such within their own distinct representational

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\(^{51}\) For the following discussion of the Malik ‘Anbar paintings, I am indebted to Skelton, “Imperial Symbolism,” 179-82; Das, *Mughal Painting*, 220-21; Leach, *Mughal and Other Indian Paintings*, 398-405; and Ramaswamy, “Conceit,” 772.

\(^{52}\) Cited in Leach, *Mughal and Other Indian Paintings*, 400. In discussing this painting, Ramaswamy argues that fixity of the globe and its dependence on divine order is antithetical to “the purposes for which the free-standing sphere was designed from 1490s by men like Martin Behaim, Gemma Frisius, and Gerard Mercator (“Conceit,” p. 779); as I have been suggesting, however, this analysis of a fundamental difference and incommensurability may not in fact be borne out, when we reconsider the European iconography of the globe and world map.

regimes. To consider one “medieval” or “pre-modern” in its use of the globe as part of a spiritual or transcendental iconographic program as opposed to the corrupt, imperial but “modern” vision of the other would be dangerous. Indeed, to attend to the apparent medievalisms of Europe’s early modernity is to open new avenues for comparison based not on pre-established markers of what constitutes modernity, but rather on the symbols, ideas, and knowledges that were circulating in the sixteenth and seventeenth centuries. One such symbol, I have tried to suggest, is the idea and image of “the world” itself.

The Unfinished Project: Reimagining Early Modernities

The breakdown of this cosmographic mode as a model for knowledge of the world, in Europe at least, by the end of the sixteenth century, and its almost inevitable fragmentation into more specific scientific disciplines such as geography, natural history, astronomy, and navigation, suggests how and why the post-Enlightenment association of science and modernity strategically obscured its early modern origins. While the cosmographic method emblematized the intellectual changes associated with what has been called the great “epistemological shift” of early modernity, it remained steeped in religion, speculation and poetic synthesis. Its desire to embrace the whole and offer a coherent and comforting vision of certain knowledge and stable world order would always be in tension with the singular techniques of empirical observation, mathematic measurement and ethnographic reportage so dear to an idealized scientific modernity. Thus, from the perspective of a post-Enlightenment narrative, the cosmographies of the sixteenth and seventeenth centuries were doomed to be discarded as pre-modern or medieval remnants in the new, modern discipline of cartography – a fate that plagues scholarship on these texts today. It is hardly surprising then that even in non-European contexts, cosmographic literature and imagery has been relegated to the realm of the pre-modern, either to be idealized with nostalgia as part of a less corrupt time of transcendental belief and spiritual power, or dismissed as evidence of a primitive and insufficiently developed culture.

54 Lestringant, “Crisis in Cosmography.”
55 Contrast, for instance, Ramaswamy’s discussion of the globe’s spiritual significance at the Mughal court with Matthew Edney’s discussion of the lack of Indian “science” from the British point of view in Mapping an
There are important lessons in this rapid historiographic overview for the future of comparative early modern studies. First, and most obviously, it indicates the extent to which Weberian narratives of modernity have become endemic, so much so that historiographic paradigms can masquerade as evidence of significant cultural difference. As several participants at the conference observed, the teleological assumptions behind the term “modernity” itself often complicate even the best attempts to resist the pressure of retrospective identification, that is, to work backward to notions of “early modernity” from a some definitive (present) modernity however that might be defined. Second, and more importantly, it suggests the extent to which we might have to interrogate our conceptions of European early modernity even as we venture into identifications of “early modernity” in non-European contexts. Perhaps searching, sustained comparative study and a less pre-determined sense of what constitutes the “early modern” can help us to see and understand aspects of European early modernity that have been hitherto obscured, aspects which may illuminate the paradoxes that underlie “the dialectic of enlightenment.”

To consider the questions of early modern comparison from this lens is, I think, to circumvent the problem of incommensurability – that of the impossibility for cross-cultural understanding, communication and translation – and come upon a more interesting one, one that is perhaps internal to early modernity itself. For the idea of the world symbolizes the very conceptual schemes, those paradigms of belief, order and organization that govern entire cultures, that are supposed to be “incommensurable.” To examine competing concepts of “world” and the motivations for them, at the very moment when they are supposedly in the process of changing, is to identify the ways in which early modern polities may have internally characterized their own capacity for global vision and exchange. That these self-characterizations share certain tropes and rhetorics, as we have seen, might suggest that the interest in universalism and concepts of totality was not strictly European in its early phases. Europe was not the only culture with universalizing desires, and this tendency may in fact be visible elsewhere. A

more important question to ask however, is whether this desire for a totalizing vision, a stable world-order, is itself a characteristic of early modernity, irrespective of location.\footnote{In taking this approach, I differ somewhat from the pioneering work of Sanjay Subrahmanyam and Serge Gruzinski, though their theorizations of early modernity and globalism in terms of “connected histories” and \textit{métissage} clearly underpin my own thinking.}

To decouple the notion of “early modernity” from a specifically European trajectory requires that we also separate such conceptions as “world” and “universalism” from their associations with the Enlightenment and its related colonial projects. To do so, we must attend to the symbolic, philosophical and intellectual histories of these terms, their circulation across cultural boundaries and the conditions under which cross-cultural understanding becomes possible. But how can this intelligibility be achieved at a theoretical plane? In a provocative attempt to think beyond the impasse of incommensurable difference and the erasures of homogeneity, Lorenzo Simpson notes that “For many postmodernist writers there is a tendency to think that we either understand an experience in terms of a rigidly given “paradigm” \textit{or} we understand in terms of one that is absolutely distinct from it. We thus have either a rigid ethnocentrism or irrational conversion. But in order to understand the new we are sometimes required to \textit{expand} intelligibly a given paradigm or decisively to reconfigure it.”\footnote{Lorenzo Simpson, \textit{The Unfinished Project: Toward a Postmetaphysical Humanism} (New York: Routledge, 2001), 90. Simpson acknowledges that “some degree of ethnocentrism maybe unavoidable” (90-91), but insists that it does not prohibit genuine engagement.} This may in fact have been the fate of “the world” as a conceptual field and category in the early modern world; in its process of transformation across cultural boundaries, it may become a marker of “early modernity” itself.

It is a surprising and scarcely noticed feature of early modern studies that the term “world,” so widely and easily used, has rarely received detailed scrutiny as a concept, a category, a system of values or as a symbol. When it has received attention, it has been primarily from a political, commercial, economic or heuristic perspective. By attending to the term “world” in conceptual terms, I suggest that we may recover ways of thinking – epistemological tendencies and dilemmas – that point to alternate trajectories for modernity and humanism. In this, I share the project of Luc Clossey and Walter Cohen, whose essays in this volume, also seek a more ample vision of cultural engagement across boundaries, both historical and geographic.
This is especially urgent from our contemporary theoretical and historiographical standpoint: the conflict between Enlightenment universalism and postmodern pluralism – the valorization of sameness or difference at either end of the spectrum – raises more urgently the need for a comparative paradigm that accounts for philosophical, ethical and metaphysical questions. The desire for a new conception of the world in early modernity was not merely motivated by imperial, hegemonic desires; as the cosmographers understood, visions of the whole were occasions for contemplations of the self and the individual’s place in the cosmos. They were also heuristic comforts – images of stability, however fictional or illusory, juxtaposed against a world of flux, a world understood to be increasingly contingent and random. Such apprehensions of contingency, which are a staple of early modern thought, run philosophically counter to the metaphysics of empire, which is predicated on notions of cosmic stability; but they are the neglected underside of the same discourse. The world map is both imperial and contemplative; in one case, its claim to mastery is contained by the Stoic exhortation against worldly glory; in the other, imperial majesty sustains and is sustained by spiritual enlightenment. Both articulate the need for and the potentials of a totalizing vision.
Figure 1. Jahangir embracing Shah 'Abbas (Abu'l Hasan, ca. 1618-1622)
Figure 2. André Thevet, Frontispiece from *Grand Insulaire* (ca. 1586)
Figure 3. "A Portrait of Gerhard Mercator of Rupelmonde." From Gerhard Mercator, *Atlas* (1595)
Figure 4. Gerhard Mercator and Judocus Hondius. From Mercator, *Atlas* (1613)
Figure 5. Abraham Ortelius, *Typus orbis terrarum* (1570)
Figure 6. Jahangir Symbolically Killing Malik 'Anbar (Abu'l Hasan, ca. 1615-20)
Figure 7. Jahangir Standing on a Globe and Shooting Poverty (Abu'l Hasan (?), ca. 1625)
Works Cited


Harley, J. B., and David Woodward, eds. Cartography in the Traditional Islamic and South Asian Societies. The


Okada, Amina. Indian Miniatures of the Mughal court. Translated by Deke Dusinberre. New York: H.N. Abrams,


Watts, Pauline Moffitt. “The European Religious Worldview and Its Influence on Mapping.” In *Cartography in


