

Introduction

Theme and Variation in the Encounter of Cultures

I don't believe in accidents.
There are only encounters in history.
There are no accidents.

Pablo Picasso

Picasso may overstate the case – or he may be right. Hindsight prediction may make things that happened seem inevitable and certainly we are all prone to such explanations. But the artist had a larger point, namely that relationships, whether human-directed or governed by natural forces, invariably include an encounter, whether probable or fortuitive, that profoundly affects the course of events. Indeed, each element of an encounter impacts others such that a form of Heisenberg effect – in which it may be nearly impossible to spot the mutual effects and the process of the encounter simultaneously – may be at work. Yet if we are to comprehend how such engagements proceed we must first be open to the possibility of their ever-presence – that is, that human interactions may meet accidentally but thereafter the entanglement is such that, except for purposes of analysis, unscrambling repercussions would be both impossible and inappropriate. To study historical and sociological encounters, then, does not have to mean uncovering universal laws or regarding all occurrences as incommensurable. Rather, as we turn the kaleidoscope of social encounters our awareness of what to take into consideration may be indispensably heightened.

In the chapters that follow we will turn the kaleidoscope a number of times, but the common factor in each revolution is a core of features that characterize the cultures of the Arab Middle East. To say that, however, is to be rather easily misunderstood. For it would seem that “characterization” might be equated with essentialization and the reference to “cultures” in the plural would seem to deny

shared identification. But neither proposition should be taken so uncritically. Essentializing is abhorrent when it becomes stereotyping; it is appropriate when both nonjudgmental and captures the capacity of any society for self-identity and modification. So, too, speaking of a plurality of Arab cultures does not mean there are no shared elements, theme and variation being vital to an understanding of what is distinctive in any cluster. The result, properly understood, is a recognition that there are features of the Arabo-Berber world that are discernible and that variation is the opposite of reductionism. Consider, in this regard, some of the features to which the present set of essays invites attention.

The starting point may seem rather strange – a Quranic school in Central Asia – where the discovery of a style of mosaic patterns may appear an even stranger place to begin. But here, on the walls of this most unusual building, artisans achieved a design whose underlying mathematics, thought only to have been solved in recent years in the West, were almost certainly understood centuries ago in order for the mosaics to have been possible. These patterns, with their nonreplicating tessellations, must, however, have been more than a mathematical puzzle to be solved: Like the great cathedrals of Christendom, with their vaulted ceilings and their stained glass windows, these tiles bespeak a representation of the God-given world, a world of ever-shapeshifting relationships that is of the essence of a cosmological view brought to the attention of mankind by an illiterate Prophet transmitting the unaltered word of God. And in that extraordinary artistic accomplishment, we can see a deep pattern of human reason and divinely ordained order that constitutes the baseline of many encounters – political and economic no less than social and expressive – that take place within the Muslim world and beyond.

Law, too, may constitute a vital point of entry to an understanding of how Muslim societies cope with the encounters of their own people and outsiders. When the invading forces of the new religion entered lands beyond the Arabian center, they met peoples whose customary practices needed to be accounted for if they were to be enfolded within the expanding House of Islam. Paving the way, however, may have been the accommodation already made in the heartland between the revealed law and the varied practices of the tribes of the region. Law, no less than military power and economic advantage, no doubt played a key role in Islam's advancement, but it did so not by replacing all

that went before but by incorporating *as Islam* many local practices. When, therefore, we look at the enfoldment of Berber law within mainstream Islamic law, we may not only be observing a process that has deep historic roots but a vantage point through which we can understand law as a vehicle for meshing the encounter of the local and the normative that has resonance in many other domains of Muslim encounters as well.

One such example is in the meaning of a gift. Islam places great stress on contractual relationships, whether in the Quran as well as in the reported actions and statements of the businessman-turned-prophet at the exemplary center of the faith. But gifts are not mere freewill offerings any more than they are only strategic vehicles for personal enrichment. In their complex pattern, distinctive to each culture and deeply entwined with multiple domains of meaning, the critical point of contact with the other comes more sharply into focus, and with it a more refined sense of just how the concept of the gift makes such encounters both possible and integral to the entire culture. Such gifts may shade into political obligations or press the limits of a bribe, but in each case, an understanding of the categorization of the gift within Muslim cultures is vital to understanding the baseline of civic and personal engagement.

Islamic law, the *shari'ca*, may be integral to Islam but can we really speak of the rule of law in countries where corruption is rife, where constitutions and codes are manipulated by those in power, and where the judiciary may be cowed into quiescence? Where ordinary people meet the law – where the law meets ordinary people – has received insufficient attention by Western scholars of the sacred law owing to their concentration on textual sources, but it is in the courts and the courtyards where the law lives and it is here that such encounters must be understood. By considering in what ways there is indeed a rule of law basis in the cultures of the Arab world, we will not only move past stereotypes without entering the realm of the overly idealized but will have the opportunity to consider how an alternative mode of fabricating a legal order may be discerned within and among the cultures of the region.

War and politics are, by their very nature, fraught with problematic encounters that reveal as much about each antagonist as their shared modes of engagement. When the United States entered the wars of the Middle East it did so with the professed aim of securing its own

territory against future attacks formulated in the region. Since outright colonial appropriation was not on the table the struggle for hearts and minds was thought to grow not from the barrel of a gun alone but from a measured encounter with the people of the region. Toward this end, various programs were tried, most notably the Human Terrain effort employing anthropologists and anthropological techniques. It was a disaster. In the fifth chapter of this book, we will explore how anthropology was used in the war in Afghanistan and why that form of encounter was such a failure.

As we move more into the political realm the events of 2011 in Tahrir Square, Cairo – and even more so the aftermath of those events – show just how much the encounter with power reveals about underlying social and cultural conventions throughout the Arab world. Touted as a youth revolution – when, in fact, it was more broadly based – and said to be facilitated by social media – when, in fact, it was revelatory of how much credibility depends on face-to-face assessment of the speaker – the Arab Spring failed almost everywhere to bring about fundamental change. But in its failure much of how people in the region encounter the powerful, how they appraise their connections to one another in the face of power, and how they cope with the aftermath of their failure come more sharply to the fore.

Insight may come from the margin, whether it is in the mosaics of an obscure religious structure or the encounter with the rare Christian missionary. For in the latter example, we can see that, while the Protestant missionaries who came to Morocco in the late nineteenth century and remained through the first half of the twentieth never succeeded in making significant converts, their encounter with the local Muslim population was by no means trivial. Indeed, their appraisal of the local circumstances and their offer of medical and scientific knowledge was not without impact, even as their assault on the faith of the people was a total failure. The fact that the missionaries are still spoken of with respect is intriguing; that the encounter showed up many features about both groups is revealing. From the margins may come change, but from the margins may, for the social scientist, come a clearer sense of how each party accommodates to change itself.

The final section of the book is denominated critical in a double sense. It addresses two key observers of Islam – Clifford Geertz and Edward Said – both for their critical approaches to the comprehension of Arab societies and political culture and as a vehicle for sharpening

our own critical faculties on the insights they offered. Geertz, it will be suggested, went well beyond describing the economic life of the marketplace in his study of the souk of Sefrou, Morocco, while Said did not go far enough – or at least in the most useful direction – in his critique of Western scholarship on the region. By attending to what each actually presented we can see that the encounters they describe – to say nothing of their own encounters with understanding the region – continue to challenge our approaches to the lives of people and politics of the Arab Middle East.

“Do we change every time we have a new encounter?” asks author William Boyd: “Are we endlessly mutable?” The answer remains unclear. What is more certain is that each encounter – whether from within a single culture or across multiple cultures – leaves its mark on both sides of the equation, and if we are to fully comprehend what that equation entails only an array of deeply studied instances will reveal the ways in which this mutual effect works. The cultures of the Arab world are not reducible to single features any more than they are so similar to any other set of cultures as to lose all distinctiveness. It is the encounter that sets the game afoot and we must follow where it may.

PART I

Expressive

1

Choice and Chaos

The Social Meaning of an Islamic Art Form

How would you represent your faith artistically? You could fashion a statue or an icon that serves as a reminder or actual embodiment of the entity you worship; you could employ a building or a site, separated from the everyday world, that serves to epitomize your belief. You could make your representations totally explicit – recognizable portraiture, life-like sculptures, light-and-shadow evocations – or you could reduce all to such a bare level as to conjure the desired sense of the infinite or the need of the worshipper to bring the requisite spiritual state to the place rather than acquire it there. You could even split the difference, seeking in the representations associated with the place of worship a path between the evident and the visionary.

The Quran describes Islam and its adherents as following a middle course, and while it may seem that when it comes to religious representations Islam has opted for the extreme of the non-iconic that may not be the whole story. True, in the years following the Prophet's death his followers avoided overt use of human figuration – even though it was present during his lifetime and the Quran contains no explicit ban – and it is also true that in parts of Muslim southwest Asia stylized human forms continued to be painted. But representation may also be coded or veiled, so mimicking the envisioned cosmos as to be consonant with it. Islamic religious art may accomplish this end when it graces the place of worship with phrases from the Quran – itself understood as the exact and unaltered word of Allah – whose calligraphic style conveys the sense of infinity and sublime reality by its internalized sound no less than its labyrinthian shape. Yet, even that may not be enough: The Word made manifest may evoke ultimate truth but it may not quite give material representation to those aspects of the God-given world that remain much more abstract. How, for example, does one portray relationships, the unseen forces that hold the world together and chaos at bay; how does one show that human nature and the cosmological order are of a piece, that they partake

of the same forces, the same precepts that organize our ties to one another and to the universe at large? It may, however, have been just such a comprehensive form of representation that, for decades and centuries, was hidden in plain sight on the walls of a building in the heart of central Asia.

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Art is the imposing of a pattern on experience, and our aesthetic enjoyment is recognition of the pattern.¹

Alfred North Whitehead

In 2005, a doctoral student in physics at Harvard, Peter J. Lu, was traveling in Uzbekistan. Looking up at the mosaic tiles on the wall of an Islamic academy (*madrasa*), he was struck by the possibility that, long before mathematicians in the West had worked it out, Muslim designers had determined the means by which a series of geometric forms could, without any gaps, be articulated indefinitely in such a way that clusters of individual elements constantly differ in their relation to one another (see Plates 1.1–1.4). The resultant pattern appears regular but is not actually repetitive. “I discovered this in the evening on Christmas Eve,” he recalled. “I then stayed up all night to start mapping the tilings.” Having been drawn to the problem of periodic patterns by the work of Oxford’s Roger Penrose on quasicrystals, Lu, together with Princeton physicist Paul J. Steinhardt, then began to survey mosaics in a number of Middle Eastern and Central Asian countries.² After an

¹ Alfred North Whitehead, *Dialogues of Alfred North Whitehead* (New York: Mentor Books, 1956).

² For a brief introduction in layman’s terms to Penrose’s work, see Philip Ball, “Fearful Symmetry: Roger Penrose’s Tiling,” *Prospect*, September 19, 2013. For nontechnical articles about the mosaics, see Paul J. Steinhardt, “Medieval Islamic Mosaics and Modern Maths,” *Islamic Arts and Architecture*, March 25, 2011, <http://islamic-arts.org/2011/medieval-islamic-mosaics-and-modern-maths/>; and Heather Whipps, “Medieval Islamic Mosaics Used Modern Math,” *Live Science*, February 22, 2007, www.livescience.com/4402-medieval-islamic-mosaics-modern-math.html. See also, Paul J. Steinhardt, *The Second Kind of Impossible: The Extraordinary Quest for a New Kind of Matter* (New York: Simon & Schuster, 2019), 46–49. On the relation of math and the occult in Iranian art, see Matthew Melvin-Koushki, “Powers of One: The

exhaustive survey, they concluded that the Muslim artisans had indeed determined how to construct nearly perfect quasicrystalline patterns, possibly as early as the mid-fifteenth century.

Complex mosaic patterns are, of course, found in many parts of the Muslim world (see Plate 1.1). At places like the Alhambra, for example, the artists rendered ever more complicated periodic patterns but never developed the most complex quasicrystalline form (see Plate 1.4). Since the mathematics of quasicrystals had, until just a few decades ago, stumped Western scholars for centuries and (in Steinhardt's opinion) no ordinary artisan could have created these patterns by chance, the question the scientists naturally asked was whether the Muslim architects and craftsmen actually understood the underlying mathematics of these patterns.³

To the art historian and social scientist, however, quite a different set of questions arises: Why did it matter to those who fashioned and viewed these mosaics to represent their vision in accord with this mathematical blueprint? What is it they sought to represent and how does that choice of figurations connect with the larger culture in which it is embedded? Indeed, what resonances are discernable in the structure of social relations and those other forms of expression – poetry, architecture, music, and narrative – that reinforce the meaning this style of geometric representation embodies? To suggest some answers to these questions we must first understand in somewhat greater detail what exactly these Muslim artisans accomplished.

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Until very recently, mathematicians were convinced that this type of never-ending, nonreplicated, yet symmetrical tiling pattern had not

Mathematization of the Occult in the High Persianate Tradition," *Intellectual History of the Islamicate World*, 8 (2017): 127–99.

³ How designers communicated to the artisans is not entirely clear, although the existence of some manuals suggests that knowledge may not always have been kept secret or only transmitted orally. See W. K. Chorbachi, "In the Tower of Babel: Beyond Symmetry in Islamic Design," *Computers and Mathematics with Applications* 17 (1989): 751–89. The ninety-seven-foot Topkapi Scroll (c. 1500 CE), though lacking instructions, conveys many geometric forms artisans could have used. See Gülru Necipoglu, *The Topkapi Scroll* (Santa Monica: Getty Center, 1995).

been achieved because the mathematics needed to compose such patterning remained unknown. Indeed, it was assumed that these highly complex forms of symmetry were not only absent from artistic representations but also did not exist in nature.⁴ So was it possible that these Muslim artisans had actually grasped the technique for producing such forms? The best candidates, dating from as early as the thirteenth century, appeared to come from Iran, Turkey, and Central Asia.⁵ However, the majority of mosaics that Lu and Steinhardt studied failed the test of true quasicrystalline patterns. But some clearly succeeded, in particular those at the Darb-i-Imam shrine built in 1453 in Isfahan, Iran.⁶ Indeed, a careful analysis of over 3,700 tiles at that structure showed that only 11 exhibited small gaps, a factor the scientists believe is attributable to inadequate repairs made over the

⁴ In 2011, the Nobel Prize in chemistry was awarded to Daniel Shechtman for his discovery of quasicrystals: “[In 1982] he was studying a mix of aluminum and manganese in his microscope when he found a pattern – similar to Islamic mosaics – that never repeated itself and appeared contrary to the laws of nature.” Associated Press, “Israel’s Daniel Shechtman Wins Nobel Prize in Chemistry,” *The Washington Post*, October 5, 2011 (emphasis added). See, generally, David R. Nelson, “Quasicrystals,” *Scientific American* 225 (1986): 42–51. On the discovery of quasicrystals in nature, see Luca Bindi et al., “Natural Quasicrystal with Decagonal Symmetry,” *Scientific Reports*, March 13, 2015, www.nature.com/articles/srep09111. On his own decades-long search for such matter, see Steinhardt, *The Second Kind of Impossible*.

⁵ Although there has been some suggestion that these forms may have been carried by artisans of the Timurid Dynasty from Mongolia and China, Peter J. Lu (personal communication) has expressed doubts about this connection. There is, however, some indication that a thirteenth-century Armenian Madonna may be the product of girih math, though whether the artisans involved came from or had contact with those in the Muslim world is unknown.

⁶ See, generally, Peter J. Lu and Paul J. Steinhardt, “Decagonal and Quasi-Crystalline Tilings in Medieval Islamic Architecture,” *Science* 315 (2007): 1106–10; and Paul J. Steinhardt, “Quasicrystals: A Brief History of the Impossible,” *Rendiconti Fisiche Accademia Lincei*, 2012, www.phy.princeton.edu/~steinh/Steinhardt_Rendiconti%20Lincei%202012.pdf

For additional illustrations, see <http://science.sciencemag.org/content/sci/suppl/2007/02/20/315.5815.1106.DC1/Lu.SOM.pdf>. See also Lu’s website, which includes a lecture and detailed bibliography on quasicrystals: www.peterlu.org//content/decagonal-and-quasicrystalline-tilings-medieval-islamic-architecture. Steinhardt (personal communication) thinks Darb-i-Imam may be the only clear example we have of quasicrystalline mosaics. Even its dating, he suggests, is uncertain, for while the building is from the fifteenth century, the mosaics could have been done in the eighteenth century.