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SULTANABAD WARE
AT THE CROSSROADS OF
PERSIAN AND ASIAN CULTURES

BY
KRISTY L. MCCOY

[22]

910

KRISTY L. MCCOY

HAS BEEN APPROVED

1991

SULTANABAD WARE:

AT THE CROSSROADS OF PERSIAN AND ASIAN CULTURES

by Kristy L. McCoy

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1991/910

A thesis submitted to the faculty
of the American University in Cairo
in partial fulfillment of the
requirements for the degree of
Master of Arts in Arabic Studies.

Cairo

1991

CHAIRMAN, DEPARTMENT OF ARABIC STUDIES

THIS THESIS FOR THE MASTER OF ARTS DEGREE

BY

KRISTY LEIGH MCCOY

HAS BEEN APPROVED


JUNE 1991

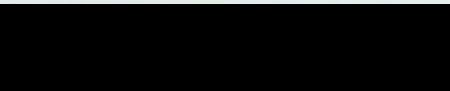
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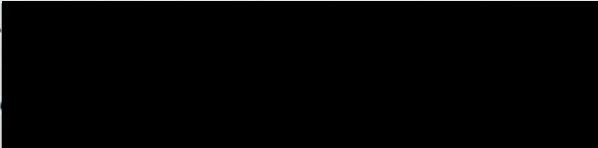
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ACKNOWLEDGEMENTS

I am grateful to many for the successful completion of this thesis:

My advisor, Dr. George Soule, for his constant support, wise counsel, and inspiration.

Dr. Bernard O'Kane, department chairman, for his encouragement and suggestion that I pursue a Masters Degree.

The librarians of Creswell Library for their invaluable assistance over the past three and a half years.

Director of the Islamic Museum in Cairo, Dr. Naimat Abu Saku and the Curator of Ceramics, Mr. Sobhi Sid.

The curator and librarians at the Arthur A. Sackler Library, Washington, D. C.

My family for their understanding and support.

to Mom and Kak

ABSTRACT

This study will review the evolution of the late thirteenth and fourteenth century ceramic type known as 'Sultanabad' ware. Historical and cultural backgrounds relevant to the style will be discussed. A complete analysis of the Sultanabad ceramics will include discussion of types, ornamentation, shapes, influences, and dating. In an attempt to find a solution to the problem of provenance concerning the wares, the works of certain authorities will be cited. A Catalogue of Fragments, taken from the Pippin Collection and the study collection from the Fustat Expedition will be described and analyzed to illustrate the impact of indigenous and foreign influences upon the Egyptian potter.

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AT THE CROSSROADS OF PERSIAN AND ASIAN CULTURES

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Chapter One

HISTORICAL ANTECEDENTS OF SULAYMANIYAH

I. THE LAND

Circumstances which affect the understanding of any given society and the art produced by it are the very geography of the region and the existing conditions of the time. An examination of the area which gave birth to some of the finest pottery the world has ever known is in order. Lying between the plains of Mesopotamia and the Persian desert to the east is an area consisting of broad plains, jutting mountains, and rivers which was known to the Arab geographers as Al-Jabal (i.e., the mountainous region). Later under the Seljuks this province became known as Irak Ajami, distinguishing it from the older Irak, and signifying the Arabic term for foreigner which became synonymous with "Persian", their first non-Arab contacts. By the fourteenth century the area was subdivided into Kurdistan on the west, and the larger Persian Irak on the east. As late as the sixteenth century, the land to the south-west of Tehran is referred to as the "Irak district". The major cities within the four quarters of this province were Kirman (later Kirmanshah), Kermān, Ray, and Isfahan, of which the latter was undoubtedly the most thriving. A network of roads linked the major cities, as well as leading access to a considerable number of lesser

Chapter One

HISTORICAL ANTECEDENTS OF SULTANABAD WARE

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Lying between the plains of Mesopotamia and the Persian desert to the east is an area consisting of broad plains, jutting mountains, and rivers which was known to the Arab geographers as Al-Jibal.(fig.1) Later under the Seljuqs this province became known as Irak 'Ajami, distinguishing it from the older Irak, and signifying the Arabic term for foreigner which became synonymous with "Persian", their first non-Arab contacts. By the fourteenth century the area was subdivided into Kurdistan on the west, and the larger Persian Irak on the east. As late as the twentieth century, the land to the south-west of Tehran is referred to as the "Irak district".¹

The major cities within the four quarters of this province were Kirmisin (later Kirmanshah), Hamadan, Rayy, and Isfahan, of which the latter was consistently the most thriving. A network of roads linked the major cities, as well as lending access to a considerable number of lesser

ones. The major artery was the Khurasan road, originating in Baghdad and extending east via Kirmanshah, Hamadan, and Rayy to the outer reaches of the lands of the Islamic domain. Later under the reign of the Il-Khanid Oljeitu (1304-16), the nucleus of the road system was shifted to the new capital at Sultaniyya.

The area of our focus lies within the triangle formed by Hamadan, Rayy and Isfahan. The topography of the land changes repeatedly from low, flat plains with desert-like conditions or fertile pasture lands nourished by rivers to areas approachable only through mountain passes. The fertile land encompassing Hamadan yielded abundant crops, most notably saffron. Since it was also noted for its cheese, no doubt there were cattle or goats grazing in the district as well. Indeed, a tale of King Bahram Gur recounts his hunting prowess in killing a number of gazelles in the neighboring plain.²

Rayy was situated in the extreme northeastern corner of the province, a city like all others composed of clay and burnt brick dwellings. The rivers watering the plain flow into and are absorbed by the desert. Rayy was noted for its spun, blue-dyed cotton, wooden combs and bowls, melons, peaches, and "a kind of saponeaceous clay, much used in washing the head."³ With the Mongol sack of 1220 the city was laid to ruin and never fully recovered its former glory,

despite the efforts of Ghazan Khan (1295-1304). Much of the remaining population had migrated to nearby Varamin, which replaced Rayy as the more important city.⁴

Isfahan, medievally situated on the northern bank of the Zaindeh Rud, was comprised of two separate cities, Jayy or Shahrستان and Al-Yahudiyah, the ancient Jewish settlement, two miles to the west.⁵ Commercially thriving, it was well known for its silks, cottons, saffron and fruits, salted meat, and padlocks.⁶ As was the fate of many others, this large and prosperous city in the tenth century had fallen into ruin during the first decades of the thirteenth century. Yahudiyah recovered sufficiently, and was to become the future Safavid capital.⁷

Kashan, located on the road from Isfahan to Rayy, was particularly famous for its ceramic tiles, generally referred to as 'Kashi' ware. Life styles were undoubtedly affected by the alternate flooding and drying up of the river which flowed near the edge of the town. To the north was Qum, producing chairs conceivably from the abundant cyprus trees, bridles, stirrups, and saffron. Manganese was extracted from this region, while mines near Kashan yielded cobalt.⁸

Circumscribed within this Hamadan, Rayy, Isfahan region is a smaller triangular area formed by the waters of the Qum and Gavmaha Rivers. Avah, west of Qum and somewhat isolated

due to the mountainous terrain, was famous for its ice pits, a popular product during the intense summers.⁹ An unusually high concentration of salt was present in the soil between Avah and Qum, particularly in the outcropping known as Salt Mountain, where snow refused to adhere to the slopes and the salt itself was intensely bitter to the palette.¹⁰ The compound was also found when the heat of the summer dried up Jaghan Naur, a Mongol name meaning 'Salt Lake', in the vicinity to the north of Karaj.¹¹ An important junction on the route from Isfahan to Hamadan, Karaj boasted two markets, one near the mosque and the other at the opposite end of the city adjacent to the gates, beyond which was an area known as "the great plain".¹² The natural beauty of the open plain, the agreeable climate, and central location with pastoral meadows all combined to make this area a favorite of the Il-Khanid princes.¹³ It is within this region that the city of Sultanabad is found.

II. HISTORY

On hearing the name Gingham spat toward the South, and then added: "I thought that the Son of Heaven must be lofty and uncommon, but how is this idiot Chong hei to sit on a throne, and why should I lower myself in his presence?...

Heaven has granted me victory over every opponent and permitted me to mount the highest round of fortune. If ye act with me faithfully, that same Heaven will grant a glorious triumph over China. Through this triumph the Mongols will win the greatest wealth and magnificence; their fame will never cease among nations."¹⁴

Long before the advent of the notorious Chingiz Khan, a mutually beneficial trade relationship existed between the nomadic tribes of the Northern Asia steppe grasslands and the Chinese civilization to the south. The balance of nomadic power was kept in check due to the Chinese policy of shifting support for the rival chieftains when one became too dominant.¹⁵ This proved effective until the arrival of Chingiz Khan, who mobilized the nomads into an effective war machine in 1206. The only natural course of events after uniting the disparate tribes was to direct and use them. Thus commenced the three-pronged attack against China,

Russia, and Western Asia, which was to influence profoundly those vast and diverse regions for many years. (Fig. 2) Thus a separate examination of each area, with added concentration on Persia, becomes necessary.

CHINA

At the beginning of the thirteenth century, China was composed of three states, the northern Chin Empire, Hsi-Hsia in the northwest, and the Sung Empire with the largest territory and population further south.¹⁶ In just five years after mobilizing the nomads both Hsi-Hsia and the Chin Empire were invaded by the Mongols, with the former quickly brought under control. The Chin however, were not so readily subdued. Subsequently, the Mongols realized that different strategies were in order for the taking of cities.¹⁷

Ogedei, the third son of Chingiz, assumed the throne in 1229, two years after his father's death. It was during his reign that the conquest of Chin was completed and a new capital established at Qaraqorum. Perhaps of more significance were the simultaneous Mongol campaigns in Russia under Batu, with the resulting birth of the Golden Horde.

Five years after the death of Ogedei in 1241, his son Guyuk briefly assumed the throne. It was during the reign of his successor, Mongke, that conquest of the Sung Empire

was initiated. Additionally, with the dispatch of his brother Hulegu to the Middle East, westward expansion of the Mongol Empire increased.

In the same year that the western limits of the Empire were realized, Qubilai, the fifth Great Khan, moved the imperial capital from Qaraqorum to the site presently known as Peking. In a further attempt to achieve legitimacy, he declared himself head of the Yuan Dynasty. The year 1279 saw the final conquest of the Sung, a full seventy years in the undertaking. The importance of this event lie in the fact that it was achieved with a minimum of destruction. Qubilai had learned well from his predecessor's destructiveness that to assume control over an intact country was to his advantage.¹⁸

RUSSIA

Following the conquest of the Chin, the Mongols under Ogedei turned their attention to the steppe grasslands in what is presently Russia. This most westerly region of the empire had been granted to Jochi (c. 1176-1227), the eldest son of Chingiz. Upon his death the area was divided among his three sons, with Batu receiving the land encompassing the Emba and Ural Rivers. From his campaigns to the west (1237-42), which added new territory and ravaged eastern Europe, the political unit known as the Golden Horde evolved.¹⁹

Serai, the winter headquarters founded by Batu on the Volga River, was ideally situated on the great international trade routes linking China, the Baltic, and the Mediterranean. There is question as to whether Serai Berke, a new city allegedly founded by Berke, Batu's brother, is in reality Batu's Serai.²⁰ The city evolved into an industrial exchange center, processing animal products and manufacturing metal goods--both of primary importance in the medieval world. New Serai was established somewhat later in the 1330's; recent excavations reveal that it, too, had been a prosperous city.²¹

Although politically tied to the Great Khan in the East, the independent nature of this province was recognized from the reign of Berke Khan.²² His foreign policy, particularly in his alliance with Egypt, was founded on two premises. First of all, a highly profitable trade in Tatar slaves from the Kipchak steppes existed. The slaves were sold by Italian merchants in the Crimea to the Mamluk rulers of Egypt. Secondly, Baybars, a Turk from the Volga region, capitalized on the power struggle existing between the Golden Horde and the Persian Il-Khanids and formed an alliance with Berke Khan in 1263. Berke's acceptance of Islam, the first Mongol of any stature to do so, may have provided added incentive in the forging of this union. An outbreak of fighting between the Golden Horde and the

Persian Il-Khanids might possibly have been precipitated by Berke's disapproval of the murder of the Abbasid Caliph at the hands of the Il-Khanids.²³ At any rate, "close religious and cultural ties" ensued for several years between the two regions due to this "Volga-Nile axis".²⁴

PERSIA

Although the Mongol raids across Persia in the first decades of the thirteenth century had been devastating, the lands in the Islamic world were still a long way from being regarded as a legitimate part of the Mongol Empire. This was pointedly illustrated by four regions of non-Mongol control. In Persia, local dynasties retained their independence, particularly in the southern region. The 'Abbasid Caliphate was unquestionably in power in Baghdad, while Saladin's Ayyubid successors held Syria. Finally, the Mamluks in Egypt had seized control and established their own sultanate.²⁵

In 1253, Hulegu, the brother of the Great Khan Mongke, departed Mongolia to undertake his three-fold mission. The initial goal was to destroy the Isma'ilis Assassins, an Islamic sect founded toward the end of the eleventh century, strong in eastern Persia and well-known for their terrorist practices.²⁶ This menace was successfully eliminated some three years later, and thus "rendered a great, if unintentional, service to orthodox Islam."²⁷ This

accomplished, the second phase of Hulegu's mission was initiated--the elimination of the 'Abbasid Caliph, the spiritual head of Islam. In February of 1257, just three months after setting out for Baghdad, Hulegu realized his goal. Various scenarios have been put forth as to the actual demise of the Caliph. Most likely he was put to death according to the Mongol custom, whereby the victim was rolled in a carpet and trampled to death to avoid the spilling of royal blood.²⁸ Members of his family fled to Syria, where Sultan Baybars not only offered them refuge, but declared one to be the rightful Caliph.²⁹

Hulegu's final thrust to weaken the political power of Islam was to conquer Syria and Egypt. On February 25, 1260, Aleppo was taken, followed one month later by Hulegu's triumphal entry into Damascus. A fortuitous event from the Mamluk perspective occurred at this time. The death of the Great Khan Mongke in Qaraqorum prompted Hulegu to leave his Nestorian general, Kit-buqa, in charge of a reduced army in order to return to Persia. Hulegu may have entertained notions of submitting his claim for the royal throne.³⁰ At any rate, before his Syrian departure, Hulegu sent a proposal to the Egyptian Mamluk ruler offering war or submission. On the advice of Baybars, the Egyptian response was to execute the messengers.³¹ Perhaps the arrogant tone of the letter as much as anything had elicited this

response, as Hulegu instructed the Mamluk Sultan, Qutuz, to remember that "Mongols were the soldiers of God on earth, who had created them in his anger and delivered into their hands all the objects of his wrath."³²

The ensuing battle between Kit-buqa and Qutuz resulted in an Egyptian victory at Ain Jalut in Galilee on September 23, 1260. This marked a major turning point in the history of events. Westward Mongol expansion was effectively checked and Egyptian supremacy in the Near East was ensured until the conquest by the Ottomans in the sixteenth century.³³

Baybars, a Mamluk officer who had distinguished himself in the battle, organized a coup against Qutuz and proclaimed himself Sultan (1260-77). Capitalizing on the rivalry existing between the Golden Horde and the Il-Khanids, Baybars concluded an alliance with Berke in 1263, a gesture to his advantage politically as well as economically.³⁴ Furthermore, the sea route between Cairo and Serai was made passable by the retaking in 1261 of Constantinople from the Venetians by the Byzantines. The "Nile-Volga axis", noted earlier, was thus forged. The Mamluk period was one of tremendous cultural and artistic flowering. Cairo, the imperial capital, was in large part responsible for providing "the means of distributing culture to the Golden Horde."³⁵

Following the death of the Great Khan Mongke, a close bond was created between the Persian Il-Khanids and the Mongol emperor, due to Hulegu's early support for Qubilai over his brother Ariq-buke.³⁶ Conversely, Berke supported Ariq-buke in his bid for the throne, widening the gulf between the Golden Horde and the Imperial throne.³⁷ Intense rivalry existed between Hulegu and Baybars as one sought to outmaneuver the other politically. Baybars offered shelter to Il-Khanid fugitives, while Hulegu attempted to influence Baybars' dependents and simultaneously allied himself with the Christians, including the Crusaders.³⁸

A succession of undistinguished rulers followed Hulegu's death on February 8, 1265, and it was not until the reign of Ghazan (1295-1304) that a serious effort was made to remedy the wrongs of the previous rulers. His acceptance of Islam was fundamental to this new era of change. Reflecting his assertion of independence was the inscription on the coinage:

"Tegrini Kuchundur Ghasunu deledkeguluksen"

("By God's power Ghazan's coinage")³⁹

Two diametrically opposed political trends comprised the social policy of the time. One group regarded themselves as a military encampment in conquered land, while the other favored creation of a strong central feudal form of government. The necessity of economic reconstruction was

paramount in the latter while the former was bent on destroying it.⁴⁰ Under Ghazan, the formation of a strong central authority gained the upper hand. According to his vizier, the famous historian Rashid al-Din, under Ghazan's rule the kingdom was "free from robbery, rapine, and injustice."⁴¹ He clearly recognized the advantage of a more lenient attitude toward the peasantry and set about to implement new reforms. Among them were the readjustment of taxes, the build up of the military for frontier defense, the provision of safe passage for trade caravans, and an effort to replenish and rejuvenate the agricultural land so plundered by his predecessors.⁴² A gradual absorption of the Mongols into the Persian society was an important consequence of Ghazan's reforms.⁴³

Oljeitu (1304-16) continued the domestic reforms begun by his brother, and in his foreign policy "had every intention of continuing the anti-Mamluk policy of his predecessors."⁴⁴ In 1305 Oljeitu began construction on his new capital at Sultaniyya, well known for his magnificent tomb structure.

The son of Oljeitu, Abu Sa'id (1317-35), was the seventh Il-khan, an auspicious number in the East pointing toward a prosperous reign. Indeed, under his rule relationships with Egypt were opened for the first time, and an embassy exchange occurred in 1322. With no heir

apparent, and internal decay caused by the formation of various rival groups, the demise of Abu Sa'id marked the end of the Persian Il-Khanate.⁴⁵ Truly authoritative governmental control was not to be found in Persia again until the end of the century, with the appearance of Tamerlane.⁴⁶

The strictly obedient nature of the Mongols was commented upon: "In the whole world there are to be found no more obedient subjects than the Tartars, neither among lay people or among the monks; they pay their lords more respect than any other people, and would hardly dare lie to them." There existed among them a mutual respect for one another, which extended to and included the women. Furthermore, it was commented upon that even when incited, a fairly frequent occurrence, they refrained from quarreling amongst themselves.⁴⁷ Lying and theft were unknown. Unfortunately, it was noted that all their admirable traits were reputed as reversed when dealing with foreigners.⁴⁸ A critical report from a European envoy stated that the Mongols were "extremely arrogant toward other people and look down on all others with disdain. In fact, they regard them both noble and humble people alike, as little better than nothing."⁴⁹

The Franciscan envoys recognized the Mongol's belief in one God; however, their claim that proper worship ceremonies were nonexistent is a paradox. Within their reports were

III. CHARACTERISTICS OF MONGOL RULE

The disparate nomadic tribes of the Mongolian steppes who came to rule the largest empire the world has ever known have often been dismissed as "barbarians" through the ages. Reports from the Franciscans who observed them, however, enumerate both positive and negative traits.⁴⁷

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enumerated several traditions and beliefs which regulated Mongol behavior.⁵² Shamanism, a combination of nature and ancestor worship, was practiced by the Mongols. The day commenced and closed with a simple ceremony of genuflecting three times to honor the sun. The people "worshipped fire and water, air and earth."⁵³ These very components of pottery were visibly present in their various manifestations of God. Anthropomorphic clay or felt idols were placed in different locations to protect the inhabitants of the camp.⁵⁴

The Mongol's total devotion and confidence in their Khan was attributed to his rule by divine right. The one God in heaven had charged the Khan "with converting his will into action"; therefore, "the command of the Khans and the command of God were thus for the Mongols one and the same."⁵⁵

A point of natural confusion among religions founded on set doctrines and open to interpretation was the complete absence of any written dogma within the Mongol society. "The God of the Mongols is a power felt in the conditions of human existence, a reality which needs no Holy Scripture. The Mongols are not, as the Koran puts it, a People of the Book."⁵⁶ Within this society there arose an explicit toleration toward other religions, the basis of later regulation imposed by Chingiz Khan.⁵⁷ Even with Ghazan's

acceptance of Islam, a respect for his former religion was shown. With his marriage to his father's widow, a union prohibited by the Koran, an adherence to the old beliefs was apparent.⁵⁸

The conversion from nomadic life to military war machine did not require the tremendous effort one would imagine. Tribal allegiance was not based on blood lines, but "shared political interests."⁵⁹ This explains how these diverse people were united under one leader. The next step was a logical progression. "The nature of nomadic society on the steppe was such that to speak of the Mongol army is really no more than to speak of the Mongol people in one of its natural aspects. For the whole of life was a process of military training. The same techniques that were necessary for survival in a herding and hunting environment were, with very little adaptation, those used in warfare."⁶⁰

It was compulsory within this culture that all Mongols learn to ride early. The idea of "civilian" was totally alien, for all adult males were eligible for military service.⁶¹ This single fact accounts for the awesome size of their military machine. Tales of their destruction as they swept across Asia became familiar, but the fact that they spared the artisans for their own use is perhaps not as well known.⁶²

No written code for the nomadic tribes existed before Chingiz, but under his organization and direction a book of laws, the Yasa, was drawn up. Concerned with domestic problems, such as taxation and inheritance, as well as foreign affairs, its formation met an obvious need in governing the vast empire.

An illustration of the exceptional organizational skills of the Mongols is seen in their communications system, the Yam. News was speedily transmitted from one end of the Empire to the other via regularly spaced post stations.⁶³ The system had existed in China long before the Mongol invasions. However, the ingenuity of the Mongols lay in their ability to recognize the inherent value in a given situation and adapt it to their personal requirements. This common sense approach can be seen additionally in the governmental administration of their Empire. Administrative control in Persia remained in the hands of the local Persian bureaucracy, while in China foreigners performed this service. In other words, circumstances were adjusted to fit the situation. There was no blanket rule for governing the very disparate regions of the vast Empire.⁶⁴

IV. PROFILE ON PERSIAN ART

Throughout centuries of Persian civilization, the artists of this region have shown a marked difference in their visual perception and subsequent creation of their individual art forms. Herein follows a summary of these essential differences, as initially observed by Richard Ettinghausen.⁶⁵

A major concern of the Persian artist was his overall treatment of the utilitarian as objects of beauty. This affected all artistic medium; whether creating a vessel to drink from or producing a handle for a sword, the artist considered the human being who would use his product. The Persian affection for animals is apparent from very early times, manifesting itself both two-dimensionally as well as in modeled plastic form.

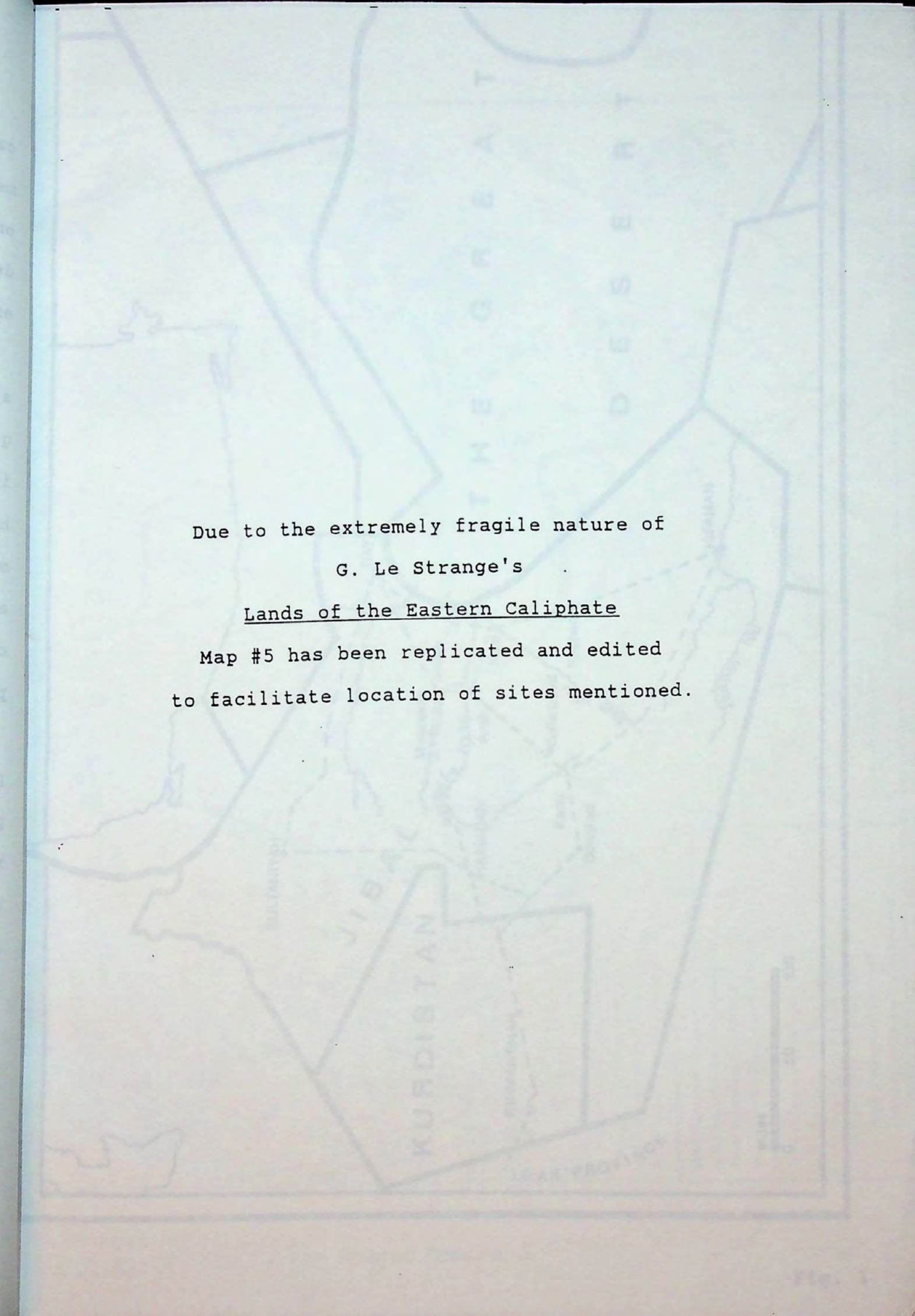
A tendency to emphasize certain features while playing down others created what Ettinghausen referred to as "shock values" or "inner tensions which are as unexpected as they are stimulating." Consider for example the graceful profile of a Kashan bowl, where the contrasting dimensions of the foot ring and rim are beautifully proportioned.⁶⁶

In the division of areas for ornamentation, whether it be on the flat surface of a plane, such as that found on a carpet or textile, or on a three dimensional plastic form, the Persian sense of order is apparent. The lovely Safavid

carpet with its large central medallion and four quarter medallions superimposed on a floral bed is a primary illustration of the Persian design sense, juxtaposing two entirely different designs and enhancing both in the process.⁶⁷

A well developed understanding of color theory and its application along with a love of floral elements were two qualities which became increasingly important due to Chinese influence. The ninth century T'ang three-color splash wares had a major impact on the Persian perception of color, and marked a turning point in the palette employed by the artists. Very complementary to this new application of color was the importation of Chinese floral designs, made possible by the Mongol invasions.

The Persian infatuation with floral designs has persisted to the present. This can be attributed in large part to the very geography of the land itself--the extreme monotony of the color, where villages and land dissolve into one another. As a welcome respite the colorful floral forms explode over the carpets and utilitarian objects alike.



Due to the extremely fragile nature of
G. Le Strange's

Lands of the Eastern Caliphate

Map #5 has been replicated and edited
to facilitate location of sites mentioned.

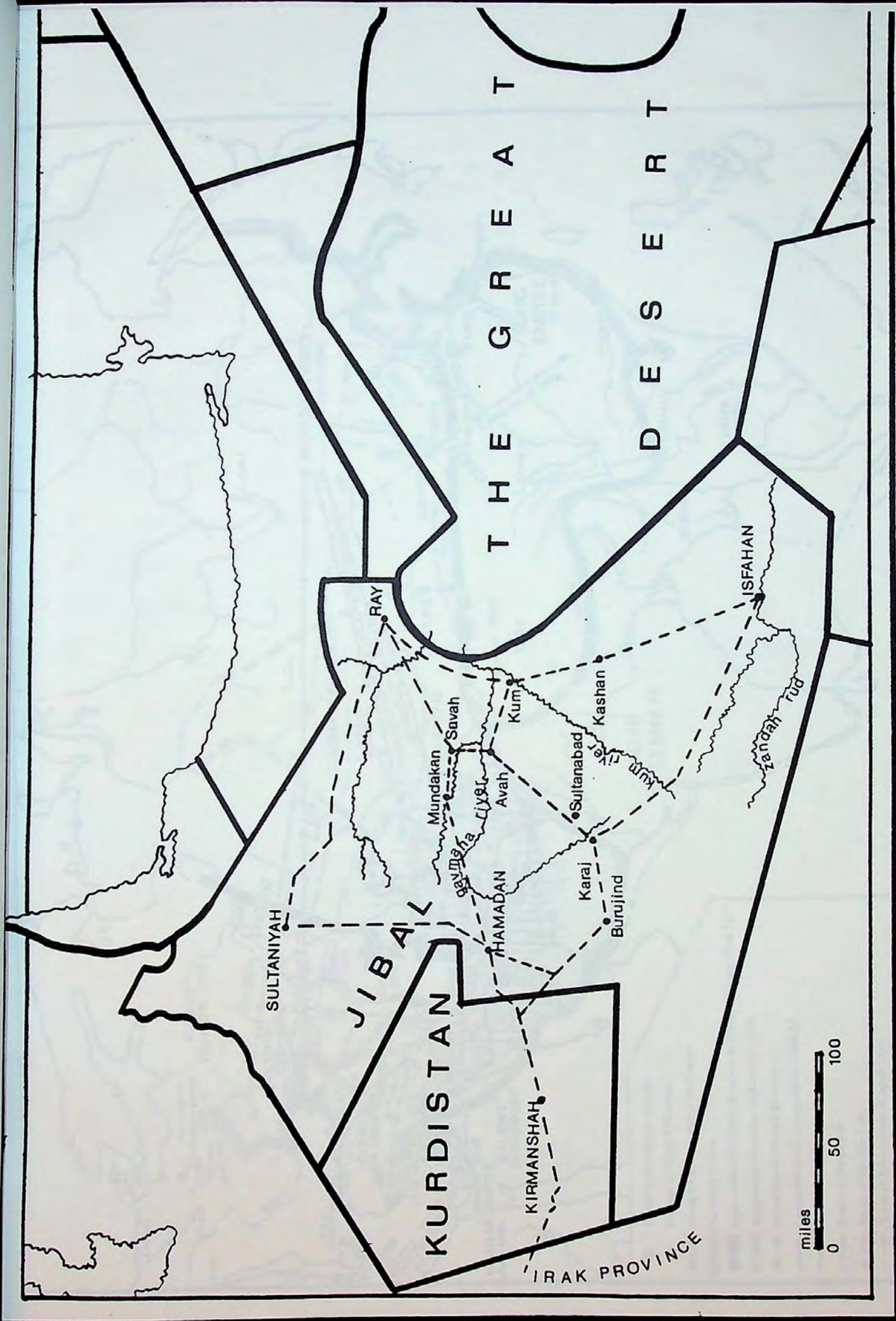
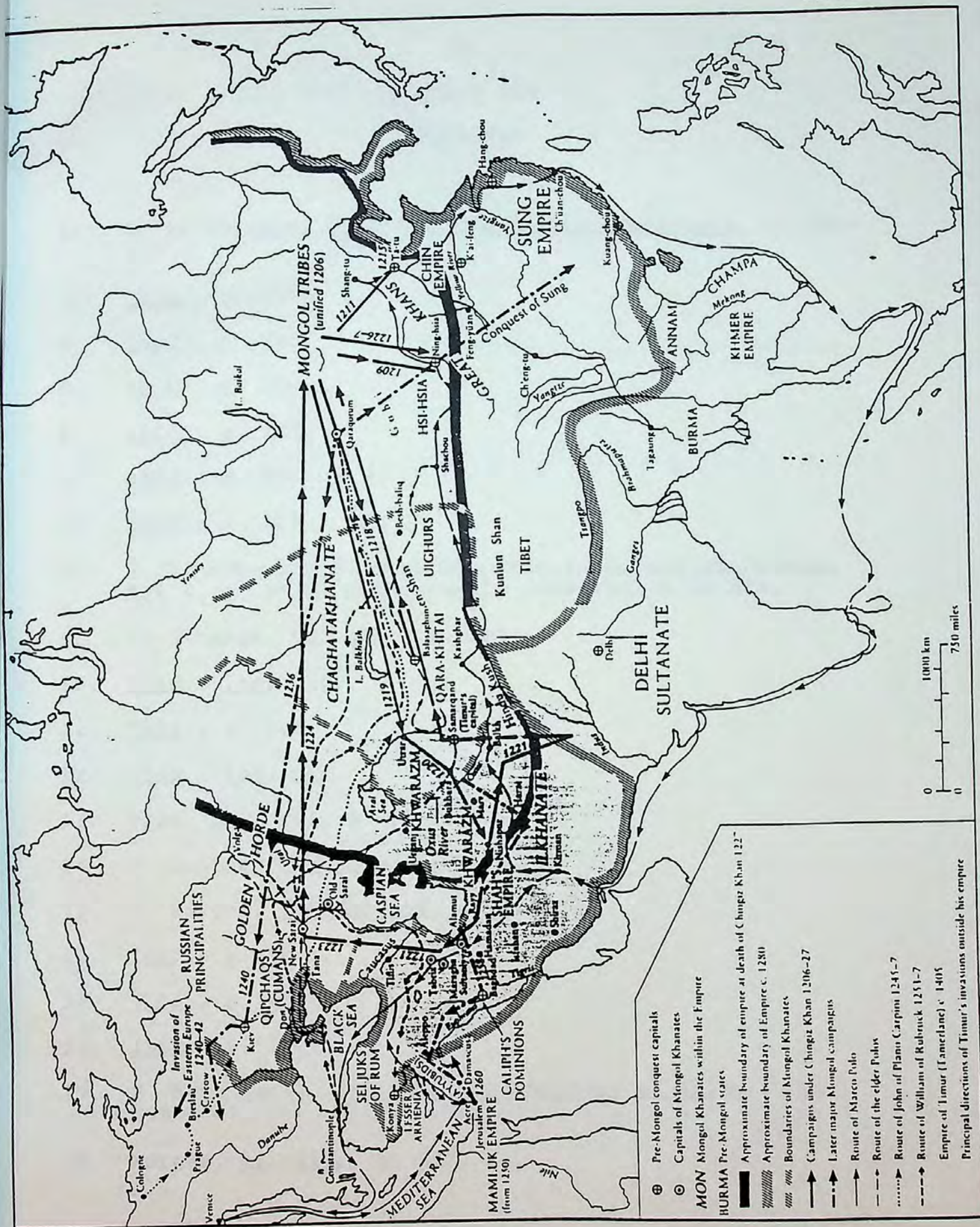


Fig. 1



D. Morgan
The Mongols Map 1, The Mongol Empire

Chapter One

FOOTNOTES

1. G. Le Strange, Lands of the Eastern Caliphate, p. 185-6.
2. Ibid., p. 195.
3. Ibid., p. 227.
4. Ibid., p. 216.
5. Ibid., p. 203.
6. Ibid., p. 227.
7. Ibid., p. 204.
8. A. U. Pope and P. Ackerman (eds.), Survey of Persian Art 4, p. 1704; subsequently referred to as SPA.
9. Le Strange, op. cit., p. 211.
10. Ibid., loc. cit.
11. Ibid., p. 198.
12. Ibid., loc. cit.
13. Pope, op. cit., p. 1632.
14. J. Curtin, The Mongols, p. 82.
15. D. Morgan, The Mongols, p. 33-5.
16. Ibid., p. 50-1.
17. Ibid., p. 65.
18. Ibid., p. 120.
19. P. Holt (ed.), The Cambridge History of Islam 1, p. 495.
20. Morgan, op. cit., p. 142.

21. Ibid., loc. cit.
22. Holt, op. cit., p. 498.
23. Morgan, op. cit., p. 143.
24. A. Lane, Later Islamic Pottery, p. 3; subsequently referred to as LIP.
25. Morgan, op. cit., p. 145-6.
26. I. de Rachewiltz, Papal Envoys to the Great Khans, p. 145.
27. Holt, op. cit., p. 345.
28. J. Boyle (ed.), The Cambridge History of Iran 5, p. 349. Morgan, op. cit., p. 152.
29. Morgan, op. cit., p. 162.
30. H. Howorth, History of the Mongols 3, p. 151.
31. Boyle, op. cit., p. 351.
32. Howorth, op. cit., p. 165.
33. de Rachewiltz, op. cit., p. 148.
34. Morgan, op. cit., p. 157.
35. Howorth, op. cit., p. 170.
36. de Rachewiltz, op. cit., p. 149.
37. Howorth, op. cit., p. 196.
38. Ibid., p. 201.
39. Ibid., p. 485.
40. Holt, op. cit., p. 491-3.
41. Howorth, op. cit., p. 485.
42. For a complete explanation of reforms, see Howorth, op. cit., pp. 498-530 or Boyle, op. cit. pp. 494-500.

43. Morgan, op. cit., p. 170.
44. Boyle, op. cit., p. 399.
45. Morgan, op. cit., p. 173.
46. Ibid., loc. cit.
47. B. Spuler, History of the Mongols, pp. 78-80.
48. Ibid., p. 78.
49. Ibid., p. 78-9.
50. M. S. Ipsiroglu, Painting and Culture of the Mongols, p. 30.
51. Spuler, op. cit., p. 79.
52. Ibid., p. 71-3.
53. Ipsiroglu, op. cit., p. 21.
54. Ibid., p. 22.
55. Ibid., p. 19.
56. Ibid., loc. cit.
57. Ibid., p. 20.
58. Boyle, op. cit., p. 380.
59. Morgan, op. cit., p. 37.
60. Ibid., p. 84.
61. Ibid., p. 85.
62. Ipsiroglu, op. cit., p. 33.
63. For more complete description of the system, see Morgan, op. cit., pp. 103-7.
64. Ibid., pp. 109-11.
65. R. Ettinghausen, "The Immanent Features of Persian Art", Connoisseur 157, pp. 207-12.
66. Lane, EIP, plates 64A, 86, and 87.

67. A. U. Pope and P. Ackerman (eds.), SPA 12, pls. 1201-2, 1230, and 1245.66.

1. BACKGROUND

Unintentionally, problems of nomenclature have been created following the discovery of new pottery types. This has been due in part to "blanket labeling", or assigning a particular name to a group of pottery based on the find site. Arthur Lane aptly expressed the situation when he stated that "geographical names are of secondary importance, for this pottery is the product of an international civilization." A case in point is the so-called "Sultanabad" ware.

A map of Iran showing the extent of the Sassanid Empire indicates a "Sassanid" pottery type found in a mountainous area on the main road from Baghdad to Shiraz. This is the same area referred to by Herodotus as the "Sassanid" pottery type. Oljeitu's successor, Arghun, is reported to have laid the foundations of a new town in the region, the site of which is the way from Baghdad to Shiraz. Further reference is made to this site, mentioning it as being from Sultanabad and locating it "at the foot of the mountain Hantun".

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Chapter Two

SULTANABAD WARE

I. BACKGROUND

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A map of Iran featuring the Persian Il-Khanid Empire indicates a "Soltan Abad" at the foot of a mountain on the main road from Baghdad to Hamadan.² This is no doubt the city referred to by Howorth. Around 1312, following Oljeitu's successful venture at Sultaniya, he "laid the foundations of a new town, in the Jemhal (the defile) on the way from Baghdad to Sultania. He called it Sultan Abad."³ Further reference is made to this site, distinguishing it from Sultaniya and locating it "at the foot of the mountain Bisutum".⁴

Following the conquest of Transoxiana during the Chingiz campaigns, the Mongols turned southward to further

their advances. Sultan Muhammad, who ruled over the whole eastern portion of the Seljuq Empire, was relentlessly pursued by the Mongols. His attempted flight to freedom took him from Nishapur, northwest to Isfara'in, and to Rayy via the major artery. It was from Rayy that he learned of the enemy's close proximity, so he departed southwest to the castle of Farrazin, "near the modern Arak (Sultanabad) on the Hamadan-Isfahan road."⁵

It is obvious from the above accounts that more than one Sultanabad exists in Persia. The city associated with the ceramic finds of the same name was only relatively recently established. Situated about mid-distance between Qum and Hamadan and to the south lies Sultanabad, a rectangular shaped town founded in 1808.⁶ Although no pottery was reportedly uncovered within the actual town boundaries, Pope has stated that great quantities were taken from at least ten different villages within thirty to forty miles.⁷ Furthermore, he attributes the variety in techniques found to the great number of sites, suggesting individual towns were responsible for certain processes of ceramic formation or ornamentation. Interestingly, many of these pieces were reportedly recovered intact and in good condition by commercial excavators who broke into ceramic workshops or storerooms.⁸ The Munich Exposition of 1910

featured bowls in pristine condition, said to have been found contained within a large storage jar.⁹

As previously stated, a variety of techniques for both the formation and ornamentation of these wares is apparent. Included under the convenient label "Sultanabad" are lustre, polychrome lustre, moulded relief in monochrome or monochrome plus gilding, as well as underglaze painting with blue, green, and transparent overglazes.¹⁰ It is inconceivable even to the unpracticed eye how such a diverse collection could realistically be grouped under the same general heading. Further explanation must be sought.

II. OVERVIEW OF CERAMIC TYPES

The contribution that Islamic ceramics have made to the general field has been consistently underplayed or misunderstood by the West. Quite unfairly they have been compared in the past with Chinese porcelains, and found inferior. However, the full realization of the unlimited possibilities inherent with low-fire clays and glazes was developed only in the Middle East. Chinese influence was instrumental in stimulating the Persian potter at various points in history. Conversely, it shall be seen that Persian influence was responsible for what has been regarded as one of the greatest periods in Chinese ceramics.

Early Egyptians developed a glaze high in alkaline for covering their ceramics. However, problems encountered with it were numerous, including "difficulty of application, a tendency to craze and even to peel or fall off the ware after firing, and a certain amount of solubility, especially if put to use in cooking."¹¹ The discovery of the use of lead as a flux to lower the melting temperature of a glaze eliminated these drawbacks. A recipe can be as simple and basic as two parts lead oxide, one part pulverized sand, and one part red clay to yield a smooth and shiny, amber toned glaze.¹²

The import of Chinese T'ang porcelains during the 'Abbasid period had a major impact on the Islamic potter.

Radial patterns employing the Chinese tri-color scheme of green, ochre, and purple were used to decorate the vessels. In addition, sgraffiato designs were applied to the clay body, their ornamentation quite independent of the overlaying lead glazes.

In a further attempt to emulate the imported Chinese T'ang porcelains, the 'Abbasid potters covered their buff or yellow clay body with a glaze rendered opaque by the addition of tin. Tin oxide not only made a white glaze possible, it imparted a soft, pleasant texture to it and enhanced the colors applied to the surface.¹³ Initially these colors were confined to blue and green.

One of the great Islamic contributions to the world of ceramics followed. The lustre technique, which had previously been applied to Egyptian glass in the eighth century, was successfully used on the tin opacified glaze. A thin metallic layer was created on the surface of the glaze in a reduction atmosphere in the kiln. Reduction involves lessening the oxygen supply during the firing. This often resulted in the blackening of the ware by smoke which then required polishing to restore the metallic sheen.¹⁴

Wares from the eastern provinces of Iran are exceptional in that their development appears to have been independent of outside influences. (Fig. 3) Tenth century

Samarkand and Nishapur produced vessels from red earthenware clay, which were then painted with a white slip, decorated with black, red, brown, or green slips, and finally covered with a thin, transparent lead glaze. From the Persian provinces in the eleventh and twelfth centuries, particularly the regions of Amol, Aghkand, and Garrus, came a new vitality and freshness. Splash ware colors were combined with linear sgraffiato or champleve carving through the white slip to reveal the clay body beneath.

Inspired by the thin, translucent Chinese porcelain imports, a revolutionary clay body was developed in the twelfth century. Highly reminiscent of an ancient Egyptian technique, this artificial body was described in Abu'l-Qasim's treatise of 1301.¹⁵ The proportions of ten parts quartz, one part ground glass frit, and one part white clay mixed together yielded a white body similar to later soft-paste porcelains. A frit is glass which has been melted, cooled rapidly, then ground into a powder. It is effective in lowering the maturing temperature when added to a clay body, and adds valuable alkalines when used in a glaze.¹⁶ The combined use results in a strongly cohesive union between the clay body and glaze.

The next century was witness to a tremendous creative burst of energy, as potters experimented and perfected a variety of decorative techniques. The search to prevent the

blurring or running of colored oxides during the firing process lead the Persian potter to attempt different solutions. Designs were incised into the frit body and clay ridges built up to contain the purples, blues, and greens of the lakabi ware.¹⁷ Silhouette ware worked in reverse. A slip pigment was painted over the vessel and the background carved away, revealing the white frit body. Lustre was instrumental in providing a large portion of the luxury wares, and the lovely mina'i wares extended the painter's palette considerably. The overglaze technique was impressively developed in the previous two luxury types, as well as in the ladjvardina enamels, named for their lapis-blue color.

By the end of the thirteenth century, the dominant technique was underglaze painting. The progression to this stage can be traced through a three-phased evolutionary process in technique and design.¹⁸ From the champleve carved slip technique evolved the silhouette wares. An experimentation ensued where progressively thinner slips were attempted by the potters until the pigment itself was stable under the glaze. Successful underglaze painting had been accomplished. The Sultanabad wares incorporated motifs from the Orient with this economical, single-firing process which provided color stability. (See Fig. 4 for chronology)

III. DISCUSSION OF SULTANABAD TYPES

In general the Sultanabad wares were represented by a sandy, coarsely-ground clay body which had a pink or buff tinge when fired. Potting tended to be thick and somewhat clumsy. The transparent glaze collected in greenish pools on the interior of the vessels, and glassy tear drops on the exterior near the foot. Additionally, the glaze not only crackled, but was subject to a surface irridescence, caused by a compoment in the glaze or the soil in which the vessel had been buried.¹⁹

Arthur Lane and Gerald Reitlinger have classified these wares according to motif and, in Lane's case, to technique as well.²⁰ A separate examination of each system of classification is necessary.

Reitlinger's earlier attempt divided the wares into a four part chronology. Close affinities with lustre ornamentation characteristic of Kashan represented the first phase. This period of overlap was followed by a development which occurred during the final quarter of the thirteenth century. Reitlinger contended that the "vitreous glaze" had originated in Fustat at the beginning of the twelfth century and had been transported to Syria. Syrian motifs were brought into Persia along with this new glaze, and marked the Syrian period of the Sultanabad style. A break occurred with the third phase, which was wholly of the fourteenth

century. The progress toward naturalism and a new liveliness in the representation of human figures was regarded by Reitlinger as an Islamic evolution in ornamentation, rather than Chinese inspired. The fourth and final stage was marked by a baroque tendency, particularly in the arrangement of ogival panels.

Vitrification pertains to the hardness or glass-like quality of a glaze.²¹ A "vitreous glaze" describes one which has been fired to this point, and would therefore include those glazes produced by ancient Egyptians, as well as those manufactured today.

A probable explanation for the Egypt-Syria-Persia linkage has been attributed to the migration of Egyptian potters to Syria following the destruction of Fustat in 1169.²² With these potters came the ability to lustre, along with the Fatimid motifs used in the process. Early Kashan wares reveal definite Fatimid influence in their ornamentation.²³ However, for Lane, the superiority of Persian ceramics negates any possible Syrian/Egyptian influence on these wares.²⁴

The division of the underglaze Sultanabad wares into three distinct types, as proposed by Lane, has shown the best understanding of the technical differences.²⁵ In the first type, details are painted directly onto the white frit clay body, and then outlined in a soft black. Contrast is

achieved through background cross-hatching, groupings of small dots, or laying down solid areas of dark blue. Small washes of pale blue or turquoise are also present. An overall reduction of the white areas shown and the gentle gradations of color produce a grisaille effect.²⁶ Vessels representing this category were included in the Dikran K. Kelekian collection. (Figs. 5 and 6)

In the second type, the white clay body is covered with a greenish or brownish gray slip and details rendered in a thick, white slip. These areas of white relief are outlined in black. While the turquoise washes are absent from this type, hatching in the background and dark blue spots lend tonal contrast to the design.²⁷ The Kelekian collection contained many superb examples. (Figs. 7 and 8)

The white background is allowed to dominate in the third Sultanabad type. Outlining in black, wide bands or solid backgrounds of deep blue, and pale turquoise washes characterize the wares. The designs depicted, a more compact body material, and thinner potting closely relates them to the Kashan lustres. (Figs. 9 and 10)

IV. ORNAMENTATION

Development of a revolutionary technique or a different approach to the rendering of previously used motifs can both herald a new ceramic style. Underglaze painting had existed in Persia at the beginning of the thirteenth century.²⁸ Therefore, it was a new approach to ornamentation, both in the motifs employed and the subdued color scheme, with their use on different shapes, which signified the Sultanabad style.

Three basic approaches were used in the preliminary division of the field for decoration. Varying widths of radiating lines forming wedges were employed for bowl interiors. Central medallions could form the core for the spokes.²⁹ Secondly, lines which were drawn while the vessel was rotating on the wheel formed concentric circles, which served to partition the field within a bowl cavity. In like manner, zones of varying width were created on the exteriors of vertical forms. Medallions were often included within these areas.³⁰ In the final method of spacial division, the central cavity of a bowl was treated as a singular unit. The image portrayed is a fraction of the total; it could conceivably be extended infinitely in any direction.³¹

The Islamic injunction forbidding the representation of living forms was never seriously adhered to in Persia. The predominant role that art played in the life of the Persian

is seen in the anthropomorphic and zoomorphic decorative subjects found in private homes as well as on articles for public consumption.³²

Although rare, human figures in typical Mongol dress do appear on Sultanabad wares. A long, sack-like tunic which doubled over the breast and fastened to the right was worn by the Mongol men and women alike. The typical male head-dress consisted of a fur cap, which was subsequently ordered changed to a turban during the reign of Ghazan (1295-1304).³³ Characteristically these figures appear situated amongst leafy trefoil foliage, their robes patterned with dots, owl's feathers protruding from their turbans, and halos drawn about their heads.³⁴

The Persian love of animals continued unabated. Depictions of animals of the hunt, such as the gazelle, rabbit, fox, wild boar, and the stag, are found with dotted coats amidst foliage.³⁵ A panther is found within the central medallion and conforming to the circular shape in a lovely example from the Kelekian collection.³⁶ Additionally, Sultanabad examples exist of humans portrayed with the animals, e.g. the vessel in the Tehran collection showing a hunter on horseback pursuing a deer.³⁷ With just a few well drawn strokes, these animals are beautifully depicted, and the Persian mastery of the line is clearly apparent.

Birds featured prominently in the wares. Parakeets, cranes, flying geese, and in particular the Chinese phoenix were depicted. They were placed within a central motif or arranged in a repeating series either oriented toward the center or aligned diagonally. Linear definition of the feathers defines the bodies of the birds.³⁸ What appears an unlikely subject choice, the ostrich, is also found, alone or in pairs. Dominating the interior cavity of the vessel, their ungainly bodies contort to fit the circular space.³⁹

Animals with symbolic imagery as well as imaginary ones are also portrayed. The elephant, camel, human headed bird, and the fish whorl are included in this repertoire.⁴⁰

The backgrounds are filled with leafy foliage which ranges from stylized simplifications of forms to more careful renderings of individual leaves and petals.⁴¹ Chinese peony and lotus blossoms are found interspersed within the foliage or within medallions. An interesting example from the Munich Exhibition has medallions containing peonies and lotus flowers as the primary focus, while long-tailed phoenixes encircling the rim are of secondary importance.⁴²

Although rare, inscriptions bestowing good blessings upon the owner are also found in the decorative vocabulary. Typically they are located on the exterior of the vessel, just below the rim.⁴³ However, they also occur within the

wedges on the interior of bowls, in the exterior petal forms, and around the central medallion.⁴⁴ The inscription is confined within the medallion itself in another variety example.⁴⁵

V. SHAPES

Throughout the history of Islamic art, the various mediams have exerted influence upon one another. A variety of metal shapes had a direct impact on the forms Persian ceramics took in the twelfth and thirteenth centuries.⁴⁶ Two standard bowl shapes, both derived from metal, were consistently produced in Near Eastern ceramic workshops at the beginning of the thirteenth century. The first type had straight sides expanding outwardly from a cylindrical foot.⁴⁷ In the second type, an outwardly splayed pedestal foot gracefully supported the sides which curved outwards and upwards before terminating in a slightly outcurved lip.⁴⁸ These shapes were supplanted by a bowl with nearly hemispherical sides extending from a small, narrow foot ring by the close of the century.⁴⁹

A thickly potted bowl, with angular sides flaring outward before extending vertically to terminate in a flange overhanging both the interior and exterior was common to the Sultanabad wares. The very differing proportions of rim and foot created a visual lightness, contrasting with the weighty physical quality of the bowls.⁵⁰ An evolution of these shapes is seen in Fig. 11A-D.

Moulded polygonal shaped bowls were also made at this time.⁵¹ The clay body employed by these potters, as described in Abu'l-Qasim's treatise of 1301, would be

expected to lack plasticity due to the absence of ball clay. Indeed, experiments have shown that although vessels can be thrown on the wheel with this body, it is with great difficulty.⁵² Moulding, however, eliminates this problem. The "short" or nonplastic body is even more suitable than plastic clays for shaping forms either in or over a mould, for it tends not to warp or crack as it dries.⁵³

The albarello shape was also present among the Sultanabad wares, (Fig. 11E) as were the wide rimmed plates and vessels with broadly flaring bellies narrowing upwardly to the rim.⁵⁴ A great variety of shapes is included under the Sultanabad label, exemplified by the Dervish begging bowl in the Ibrahim Beyhum collection.⁵⁵

Potters in the Middle East have traditionally adhered to a method of formation which has affected the proportions of the finished vessel and made several features characteristic.⁵⁶ Forms were completed in stages, requiring time for the clay to firm up before progressing further. Vessels were inverted into clay chucks so that the narrow foot rims could be blended into the outwardly expanding walls. The graceful profile which was the result would not have been possible otherwise, for the wet clay would easily split or slump from the force exerted on it.

VI. INFLUENCES

A multitude of sources can provide the original stimulus to generate new artistic styles. The steps leading to total integration of a particular technique or motif are the initial transfer of an idea and its subsequent adoption into the artistic repertoire.⁵⁷ Textiles, illustrated manuscripts, Quranic illumination, and Chinese ceramics may have contributed to the formation of the ceramic style known as Sultanabad.

A. TEXTILES

Although a nomadic culture, textiles were familiar to the Mongols. Providing colorful visual contrast to the steppe grasslands, their felt homes were embroidered with scrolling vines and trees, in which birds and beasts were interspersed.⁵⁸ When Hulagu initiated his three-prong attack in the West in 1253, he was part owner of select Imperial factories in China. His share of the products from this joint venture, consisting primarily of beautiful silk brocades, was later dispatched to Persia to his great grandson, Ghazan.⁵⁹ By the end of the thirteenth century, the ornately patterned silks were not only used as diplomatic gifts between China and the West, but a lively silk trade reached into Europe as well.⁶⁰

Ornamentation of these silks consisted of a division of the field into broad and narrow bands, which were then

subdivided into square or rectangular panels. Thuluth inscriptions and "Chinese animals, lotus-palmettes, crescents, and small, neat diaper or trellis-patterns" comprised the interiors of these panel subdivisions.⁶¹ Lane noted the similarity between this characteristically Mongol "stripe and panel" arrangement and the ornamental field division found on fourteenth century Persian, Syrian, and Egyptian ceramics.⁶² (See silk fragment from Egypt, Fig. 12)

The rendering of the Chinese floral forms, the lotus and the peony, is reminiscent of those portrayed on the Sultanabad wares. (See comparison in Fig. 13) Likewise, the textile description of the flying birds is similar in treatment to the phoenixes on the ceramics. (See comparison in Fig. 14) In some cases, a "built-up" relief is seen on the silks, recalling the ceramic slip relief on the second type of Sultanabad ware described by Lane.⁶³

A subdued color scheme is found on two satins from the Victoria and Albert Museum.⁶⁴ The use of beige, pale blue, and black recalls Lane's first type of Sultanabad division.⁶⁵ Additionally, the use of black to outline much of the ornamentation in the textiles was a technique employed by the Persian potters.

B. MANUSCRIPTS AND QURANIC ILLUMINATION

An artistic confrontation naturally occurs when two diverse societies are brought together as a result of invasion or political events. An initial period of imitation is followed by an integration of the new tradition with the local.⁶⁶ The fourteenth century miniatures of the Persian Il-Khanid court are the products of such an encounter between the Near and Far East.

The first of the known manuscripts produced during the reign of Ghazan is the Manafi' al-Hayawan, or 'The Usefulness of Animals', executed by Ibn Baktishu at Maragha in 1298. Located in the Pierpont Morgan Library, it is commonly referred to as the Morgan Bestiary. Represented are illustrations in the Mesopotamian style, with its heavy and solid figures, two-dimensionality, and brilliant colors.

A different style with a lighter approach and employing Chinese motifs, including the phoenix, is also shown.⁶⁷ The rendering of the animals themselves, with black outlines, linear shading, spotted coats, and the feather-like treatment of the fur of the recumbant lioness, all parallel the animal descriptions in the Sultanabad ware.⁶⁸ Additionally, the "window concept", where a glimpse of a world which expands infinitely in every direction, is represented in the Morgan Bestiary. Treatment of the horse just entering the scene in the manuscript is very similar to

the portion of the spotted deer seen in the central medallion of a large bowl from the Kelekian collection.⁶⁹ (Fig. 15)

Four volumes of the Jami' al-Tawarikh or 'Universal History' were written by Ghazan's vizier Rashid al-Din. He was reportedly assisted in this vast undertaking by a team of scholars consisting of a Mongol, two Chinese, several Persians, a Buddhist monk and a Western Christian monk.⁷⁰ One volume, dated 1306, is located in the University of Edinburgh library. The Royal Asiatic Society in London had a second volume dated to 1314. Two other manuscripts are in the Topkapi Museum, Hazine Library, and are dated to 1314 and 1317.

Heavy black outlines and the use of a subdued color scheme of earthy tones and slate blue are characteristic of several of the illustrations.⁷¹ The Persian mastery of the line is also present in the rendition of the human form. The painted figures of both the manuscript illustrations and the Sultanabad ceramics are defined with a minimum of long, continuous lines.⁷²

Figures attired in typical Mongol dress and placed in garden settings are illustrated in the volumes found at the Topkapi Museum. (Fig. 16) In an annunciation scene, an interesting depiction on a ceramic vessel of a flying crane set in a sort of scrolling foliage recalls similar motifs on

the Sultanabad pieces.⁷³ The same bird motif, entering the scene from the upper right, is found in another illustration from the Bibliotheque Nationale in Paris.(Fig. 17)

Important to Islamic art is the continuity of motifs which exists from mankind's highest expression, architecture, through the minor arts. Within the illuminations of the Quran, ornamentation characteristic of other art forms can be found.

In the Quran of Baybars al-Jashnagir (1304-6), the illuminator Sandal utilizes a finely hatched textural background and teardrop motifs as a filler devices.(Fig. 18) The teardrop motif had been used as ornamentation on tenth century tin opacified lustre ware as well as later Persian underglazed ceramics.⁷⁴ The leaf medallions in the Sultanabad ware could conceivably be an evolution of this shape.(See Figs. 5 and 8)

Reminiscent of Lane's first type of Sultanabad ceramics is the subdued color scheme of blue and black painted directly onto a white page, a feature seen in Oljeitu's Hamadan Quran (1313).⁷⁵ A decorative device unique to this Quran is the boxing in of the pages, which are then further subdivided into panels for the written text.⁷⁶ This recalls the earlier mentioned "panel style", characteristic of certain Mongol textiles and the decorative division of some of the Sultanabad ceramics.⁷⁷ Moreover, the introduction

of chinoiserie elements in the form of peonies is seen within the margin ornamentation of the Hamadan Quran.⁷⁸

C. CHINESE CERAMICS

A brief look at the historical and economic situation in China is necessary in order to fully appreciate the unique situation in which the Chinese potter found himself. With the threat of invasions from the Mongols, the Chinese Southern Sung government was obliged to institute methods of providing revenue for defense and administration. One of the most profitable means was through active sponsorship of the overseas silk and ceramic trades, combined with the establishment in the thirteenth century of a series of Superintendents of the Shipping.⁷⁹

Initially, the port of Canton handled the greatest percentage of the overseas trade, which was carried by the Arabs and Persians. However, from the second half of the thirteenth century there was a shift to the north to Ch'uan-chou, which developed into the major port. The population included a large percentage of Muslims, whose wealth and prosperity was well-known. The evolving merchant class became increasingly important, with the ability to influence what was to be imported and exported.⁸⁰

The superintendent appointed to Ch'uan-chou, a man called P'u Shou-keng, was of Persian ancestry and profited from his own trading fleet. Because he was not Chinese, he retained his position following the Mongol invasion, as

foreigners were appointed to most of the prominent governmental posts.⁸¹

The new rulers were keenly interested in the revenue to be generated through a lively overseas trade. In exchange for Near Eastern metalwork, glass, crystal and textiles, Chinese silks and the ceramics from Lung-ch'uan and Jao-chou were exported. To meet the increased demands of the foreign trade, industrialization of the privately owned ceramic workshops occurred under Mongol rule in the late thirteenth and fourteenth centuries.⁸² Relieved from the demands of the Chinese imperial court, the potters were allowed total artistic freedom under the Mongols. Near Eastern merchants, capitalizing on this situation, brought cobalt oxide from Persia to ornament the more subdued Chinese wares.⁸³ This foreign intervention profoundly influenced the decorative ornamentation of ceramics throughout the world for centuries.

The Lung-ch'uan celadon wares were produced from a number of kilns in Chekiang and Fukien provinces. Depending on both the temperature of the kiln and the reduction cycle, the glaze could vary from gray green to grey blue. The large capacity Chinese kilns with ten to twelve chambers could fire 20,000 to 25,000 vessels at once.⁸⁴

One of the most common shapes produced was the simple, hemispherical bowl with either a straight or slightly

everted rim. Carved or moulded lotus petal decoration on the exterior provided the only ornamentation.(Fig. 19A) By the end of the thirteenth century, this form was a characteristic bowl shape found in the Near Eastern ceramic workshops.⁸⁵ This shape has been uncovered from sites ranging from the Philippines and Indonesia to Fustat.⁸⁶

The relief carving of the peony blossoms and foliage on the Lung-ch'uan trumpet vases is reminiscent of the painted decoration on the Sultanabad wares. The arcading near the base recalls similar treatment on the exterior of the Sultanabad vessels.(Fig. 19B)

Kaolin clay and feldspathic petuntse were the basic ingredients for the delicate, white porcelain known as Ch'ing-pai, Chinese for 'clear white'.⁸⁷ This translucent clay body provided the impetus for the creation of the Seljuq white wares. Carved, incised, or moulded decoration characterizes the Ch'ing-pai porcelains. Organization of the exterior surface of the jars or mei-p'ing vases is in a series of bands, with the zone nearest the foot comprised of petal panels. The central band is often ornamented with a pair of phoenixes or a lotus scroll.⁸⁸ Floral scrolling with emphatically hatched, textural backgrounds recalls similar treatment found on the Persian Sultanabad ceramics.(See Fig. 20) Bowl interiors were moulded into wedges with floral decoration which radiated from a central

medallion.⁸⁹ Also similar to motifs seen on Sultanabad ceramics were a pair of phoenixes set in a floral background and rotating around the center.⁹⁰

A second type of Yuan porcelain was the small-footed bowls with moulded designs, known as Shu-fu ware. The hemispherical bowls often had everted rims and lotus petal ornamentation on the exteriors. Both the rounded bowl shape and some of the moulded motifs employed parallel the Persian ceramics.⁹¹ (Note the flying cranes in Fig. 21B)

Under Mongol rule, a change occurred in the Chinese Tz'u-chou wares which may have been the result of Persian influence. The earlier use of a transparent green lead glaze over painted decoration gave way to the employment of a turquoise blue alkaline glaze.⁹² The division of the vessel's exterior into bands with floral designs and scrolling vegetation, set against a hatched background, recalls similar treatment on the Sultanabad ware. (Fig. 21C)

The use of floral motifs was believed to have been transmitted to China from the West. Chinese foliage patterns have been traced to the Western acanthus and half-palmette borders which were initially used to embellish Buddhist stone tombs.⁹³ A lapse of several centuries occurred before their introduction on Chinese ceramics. The link for the transference of these motifs from architecture to the minor arts is provided by silver.⁹⁴ This costly

commodity was then imitated in less expensive materials, mainly lacquer and ceramics. The transference of motifs, from stone to silver, lacquer, and ceramic materials is clearly illustrated in Figs. 22, 23, and 24.

It was not until the Mongol occupation that the Chinese began to manipulate the lacquered surface. Previously, emphasis had been on pure, undecorated form. Under the Yuan dynasty, lacquer was built up in successive layers and carved for the first time.⁹⁵ The Smithsonian's Sackler Gallery contains carved lacquer depictions of both flower motifs and long-tailed phoenixes set in foliage and flying around the center of a circular tray.⁹⁶ An interesting ornamentation occurs on five lacquered objects also in the Sackler. The design is highly reminiscent of the carved stucco beveled style "C" found in ninth century Samarra.⁹⁷ (See Fig. 25)

VII. DATING

Two problematical areas must be considered with research of any ceramic type. While provenance can only be firmly established through careful site excavations, the problem of dating can be accomplished with examination of vessels in collections.

Richard Ettinghausen has published a list of dated ceramics from various collections.⁹⁸ He noted the impact of the Mongol invasion on the artistic community, reflected in the poverty of dated vessels between the years of 1226 (624 H.) and 1242 (640 H.).

Three dated bowls in the Kelekian collection, each bearing a Sultanabad attribution, span a period of fifty-one years. The vessel dated 667 H./1299 exhibits a distinctive profile, characteristic of Sultanabad ware, and an exterior inscription band as sole ornamentation. (Fig. 26) It is interesting to note that Ettinghausen has a completely different dating of 677 H./1278 for the same vessel. In both technique and ornamentation, a wide discrepancy exists between this bowl and the Rayy monumental style of Fig. 27, dated 624 H./1227.

The third dated bowl from the Kelekian collection is inscribed with the year 668 H./1269. Identical dimensions, indicating use of a mould, and similar motifs would appear

to designate a similar dating for another bowl from the collection. (Compare Figs. 28 and 29)

Although Lane made reference to the Kelekian collection which was exhibited at the Victoria and Albert Museum, he stated that there were no dated pieces represented.⁹⁹ He does suggest that the Sultanabad wares were fully developed before the fall of the Il-Khanid empire.

A bowl with flaring sides and wide everted rim from the Freer collection, number 09.317, contains an inscription, illegible except for the date of 676 H./1277.¹⁰⁰ According to the Sackler Museum records, the sample taken for thermoluminescence (TL) testing indicated the vessel was last fired between 470-1100 years ago, supporting authenticity.¹⁰¹

Additionally from the Freer a large jar, number 08.198, with a moulded decoration of animals running through foliage is dated to 683 H./1284-5.¹⁰² Both the Metropolitan Museum of Art and the Kelekian collection contain comparable vessels with monochrome lapis-blue glazes over moulded ornamentation.¹⁰³ The example from the Metropolitan is dated 681 H./1282-83, suggesting a similar origin to the Freer jar.

According to Ettinghausen, a fragment of a star tile from his private collection, inscribed 680 H./1281 or 681 H./ 1282, is the first dated instance in which the new

Sultanabad style is apparent.¹⁰⁴ (Fig. 29B) Both the mother camel and her suckling baby are rendered with spotted coats and set in a foliage background.

Most scholars are in general agreement that the Sultanabad wares date from the late 13th and 14th centuries. The most recent time frame submitted for the style was offered by Ernst Grube, who dated the examples from the Keir collection to the 14th century.¹⁰⁵

VIII. PROVENANCE

The problem of provenance is particularly difficult to resolve. The name "Sultanabad" was a convenient label for vessels found within the general region of a city established some five hundred years following their production. It remains unclear whether the style was diffused from one major center and imitated at different workshops, or was a product from one particular atelier and exported. However, because of close interrelationships with other contemporary ceramics, simultaneous independent development in a number of scattered small towns seems unlikely.

The information contained in Abu'l-Qasim's treatise on ceramics has provided valuable insight into the understanding of ceramic production in the early fourteenth century. The section on twice-fired vessels is particularly relevant, where it was stated that "Those that come out of the firing white they paint with the enamel of two firings, or with lajvard, or with pure turquoise."¹⁰⁶ Direct reference was therefore made to three entirely different decorative techniques used on products from the same firing.

In a sixteenth century copy of the treatise, it is indicated that only the best pieces were selected for the lustre technique, as "Otherwise it is simple lajvard, or turquoise, or transparent, and this needs no painting with

glaze."¹⁰⁷ The question arises whether the "transparent" referred to was perhaps underglaze, a single-fired technique which required no additional glazing. Surviving ceramics have indeed confirmed that lustred, incised slip, ladjvardina, and underglazed vessels were all fashioned from the same general stock.¹⁰⁸ Ettinghausen drew distinct parallels in both form and decorative motifs between the "muffle painted" ware, or ladjvardina, and the Sultanabad underglazed ceramics.¹⁰⁹

Watson has demonstrated that available evidence indicates that Kashan was the production center for all lustre ware, and that the Kashan style evolved from the Rayy monumental style.¹¹⁰ Technical or ornamental differences have frequently been attributed to various places of origin. However, the explanation is more likely due to evolving styles and techniques, combined with the co-existence of workshops having individual specialities.¹¹¹ The obvious cannot be ignored, and the human factor must be considered. Examination of lustre star tiles, originally from the Imamzada Ja'far, has shown them to have been the works of two masters from the same workshop. The personal style of each artist was apparent, although the techniques employed had been an evolution of that individual workshop.¹¹²

This co-operation which existed with tileworkers was seemingly paralleled among the several painters working

together under one master in a workshop. Both lustre and underglaze ornamentation in different painting styles was used on vessels produced from the same mould.¹¹³

The longevity of motifs in Persia is clear. It is portrayed in the rendering of a Sasanian senmurv on a lustre bowl, dated to the ninth or tenth century.¹¹⁴ Likewise, birds carved in the walls of Taq-i-Bustan could conceivably have been the inspiration for lustre birds of the Kashan style.¹¹⁵ (Compare with Fig. 30) These carryovers from ancient Persian civilizations have been combined with new impulses or rendered in a different manner to produce a new aesthetic.

Although acknowledging Chinese influence on the Ilkhanid ceramics, Oliver Watson maintained that the majority of the decorative ornamentation evolved from Persia during the pre-Mongol period. He argues that attention was directed toward development of the underglaze technique, while "stylistic dependence" was based on the lustre tradition.¹¹⁶

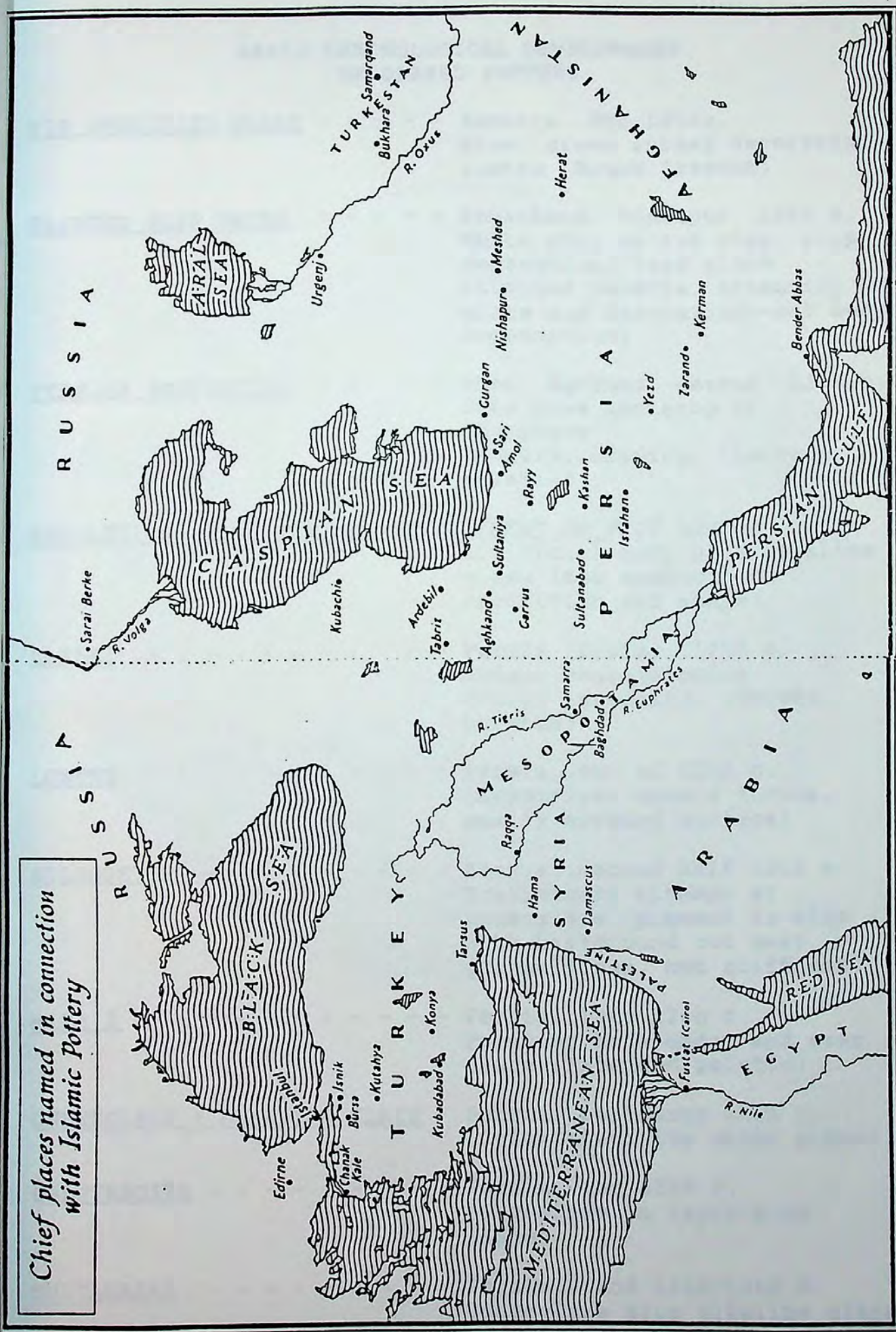
The problem of provenance is compounded when discrepancies are given inflated importance, inadequate labels are assigned, or conclusions are based on improper site excavations. The Metropolitan Museum's celebrated "Macy" jug, dated 612 H./1215, was originally attributed to Sultanabad, where it was alleged to have been found. The

technical skills involved strongly indicate Kashan as its place of origin.¹¹⁷ On a much larger scale were the Gurgan finds. They are now generally acknowledged to have been a large cache of vessels secreted away under the impending Mongol threat, and do not signify a separate center of pottery production.¹¹⁸

A large discrepancy can exist between what present day historians consider 'wasters', and what may have been regarded as merely a 'second'. Watson has suggested that the single substantiated lustre 'waster' from Rayy was probably no more than a less than perfect piece, considered valuable enough to lustre and refire.¹¹⁹ The Sultaniyya waster published by Rice was presented to him by villagers, who supposedly uncovered it from "neighbouring mounds". Furthermore, he states that this type of blue-glazed bowl was produced there during 1220-87, when "Sultaniyya was the principal city of the Mongol dynasty."¹²⁰ In fact, Oljeitu only began construction on his new capital in 1305. (see section on Persian history in Chapter One)

Improper labeling, often due to lack of understanding, has led to confusing classifications and identifications of ceramic techniques and wares. Frederick Matson has explained a number of instances where this has lead to confusion.¹²¹ As silica is a basic ingredient in every glaze, the term 'siliceous glaze' is not an appropriate one

Chief places named in connection
with Islamic Pottery



BASIC CHRONOLOGICAL DEVELOPMENT OF GLAZED POTTERY

<u>TIN OPACIFIED GLAZE</u>	- - - - -	Samarra..9th-10thc. Blue, green splash decoration; lustre (Brush freedom)
<u>PAINTED SLIP WARES</u>	- - - - -	Samarkand, Nishapur..10th c. White slip on red clay, slip decoration; lead glaze (Limited palette, attention on glaze and decoration--not body composition)
<u>PERSIAN PROVINCIAL</u>	- - - - -	Amol, Aghkand, Garrus..12th c. Slip plus incising or champleve (Angular drawing, limited palette)
<u>REVOLUTION--12TH CENTURY DEVELOPMENT OF FRIT BODY</u>		
		Artificial body plus alkaline glaze (New emphasis on decoration and shape)
<u>LAKABI</u>	- - - - -	Persia (Syria)..12th c. Ridges contain color (Color intensity, limited palette)
<u>LUSTRE</u>	- - - - -	Persia..end of 12th c. (Expensive, double firing, easily abraded surface)
<u>SILHOUETTE</u>	- - - - -	Persia..second half 12th c. Preliminary attempt at underglaze, pigment in slip with background cut away (Clean lines, but stiffness)
<u>MINA'I</u>	- - - - -	Persia..late 12th c. Painting both under and over glaze (Extended palette)
<u>UNDERGLAZE + ALKALINE GLAZE</u>	-	Persia..beginning 13th c. (Color stability under glaze)
<u>LADJWARDINA</u>	- - - - -	Persia..end 13th c. (Overglaze on lapis-blue glaze)
<u>SULTANABAD</u>	- - - - -	Persia...end 13th/14th c. Underglaze plus alkaline glaze (Single firing, brush freedom)







Dikran Khan Kelekian Collection
Paris, 1910 pl. 48

Fig. 7



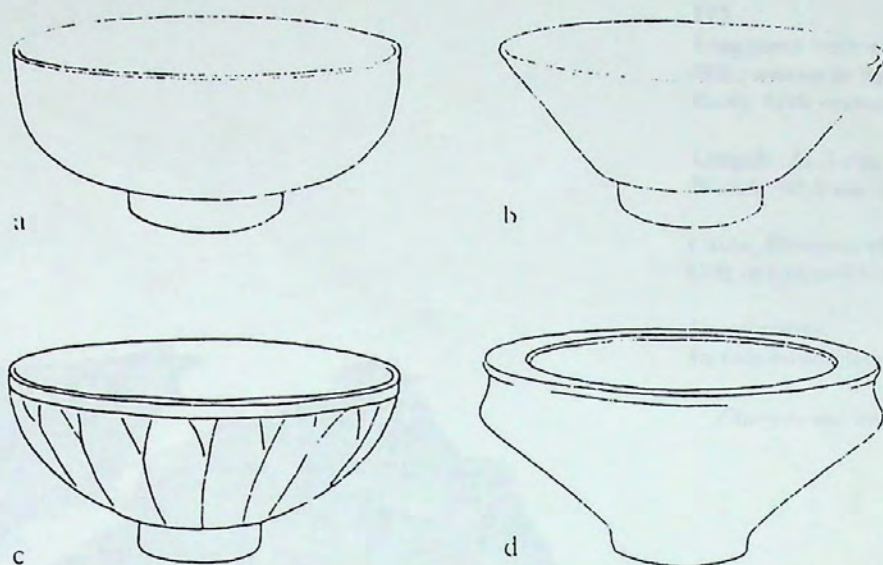




A.



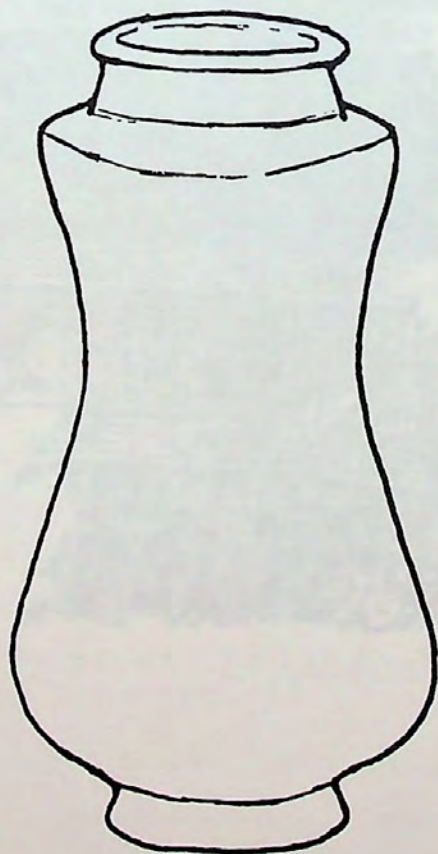
B.



J. Soustiel
La Céramique Islamique

Fig. 9 Evolution des formes: coupes hémisphériques (a, c) et bols tronconiques (b, d) aux XIII^e et XIV^e siècles:

- a) Céramique à décor à reflets métalliques. Art seldjoukide. Kâchân. Datée 1211
- b) Céramique à décor noir sous glaçure turquoise. Art seldjoukide. Kâchân. Fin XII^e siècle
- c) Céramique à décor à reflets métalliques. Art mongol. Région de Sultanabad. Début XIV^e siècle
- d) Céramique à décor noir et bleu sous glaçure incolore. Art mongol. Région de Sultanabad. XIV^e siècle



113

Fragment with stripes

Silk: woven in light green, dark blue, green

Early 14th century

Length: 31.5 cm. (12 $\frac{7}{8}$ in.)

Width: 35.0 cm. (13 $\frac{3}{4}$ in.)

Cairo, Museum of Islamic Art, 5872

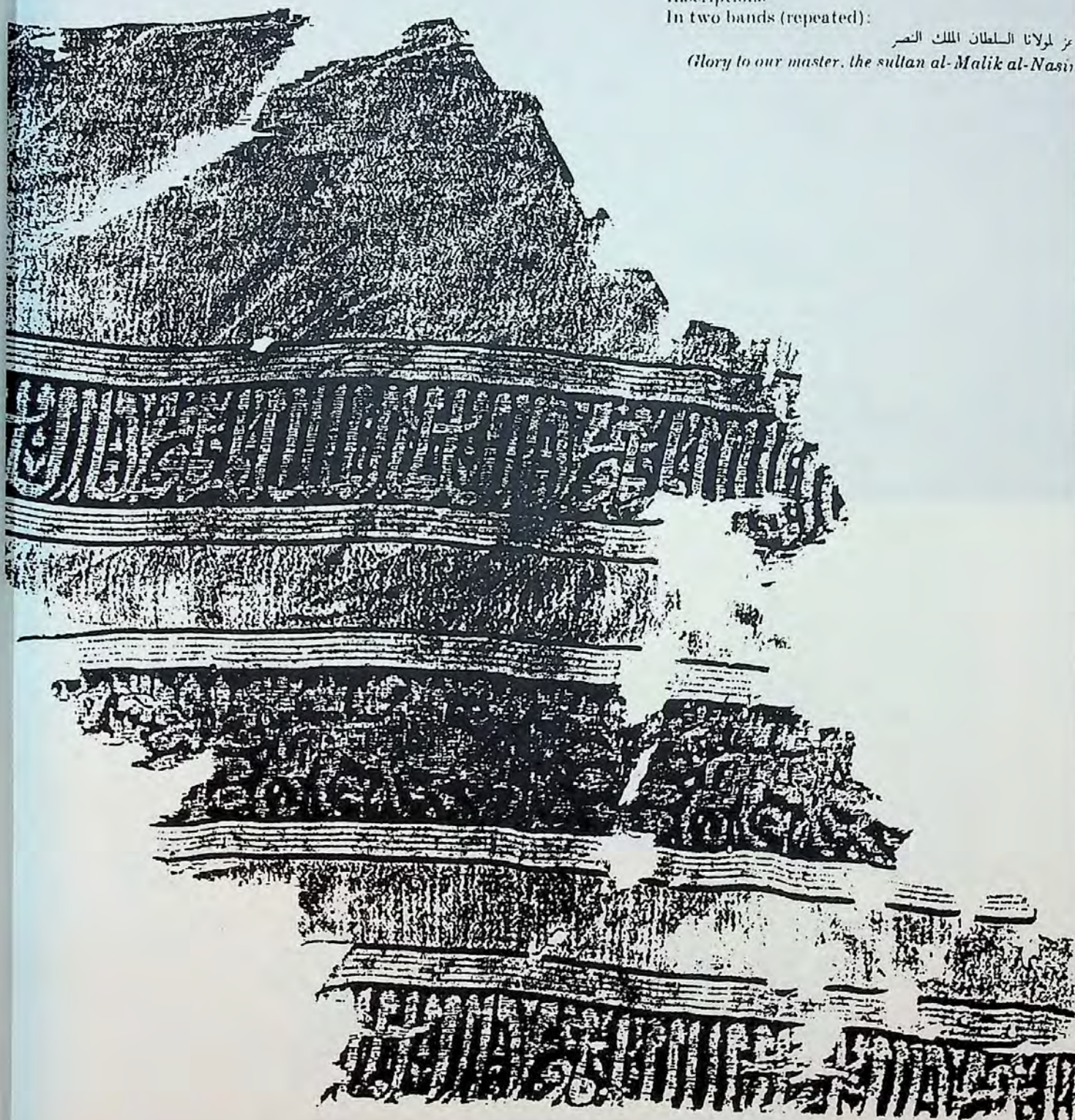
Gift of Colonel Gayer Anderson, 1921

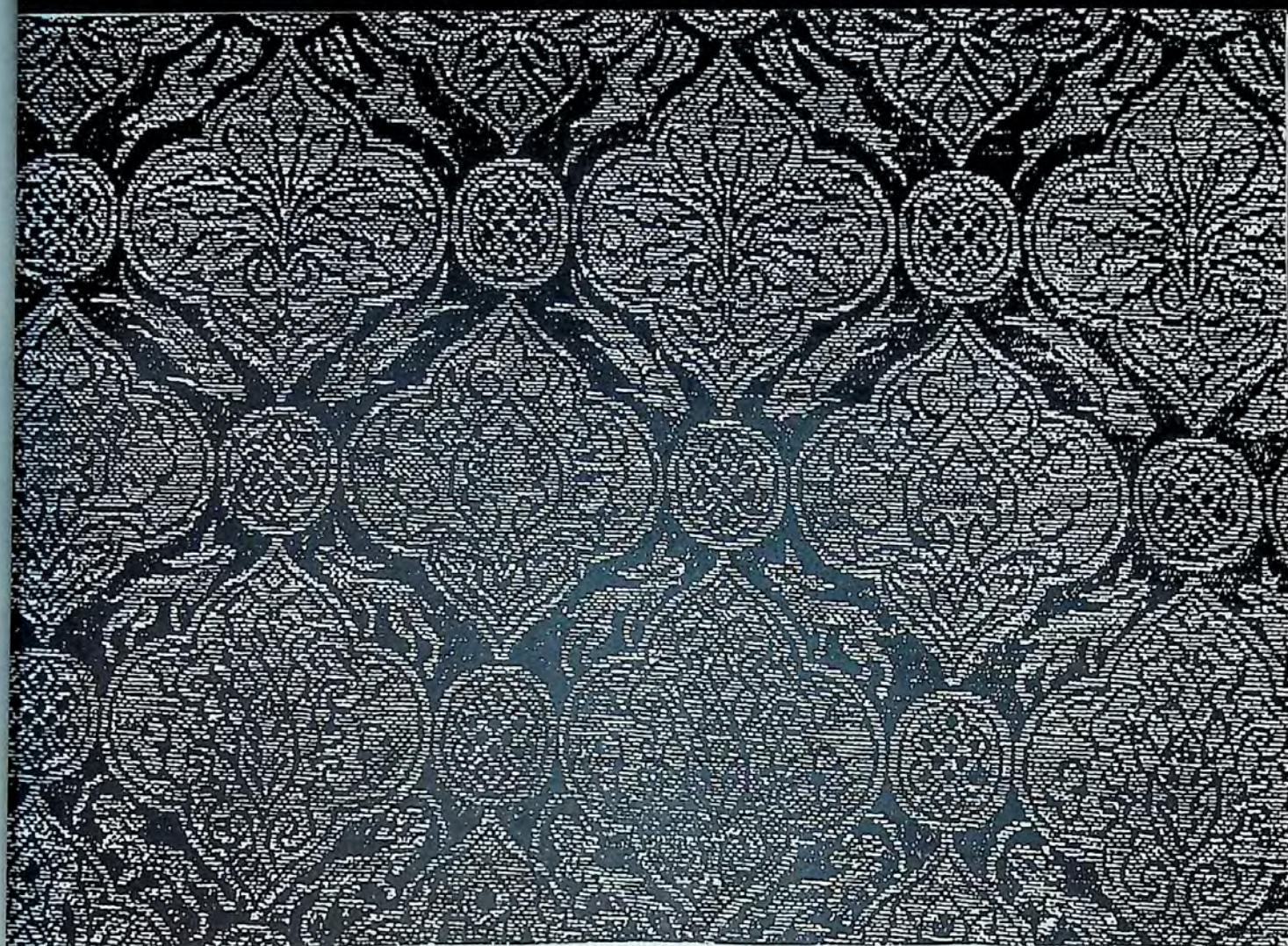
Inscriptions

In two bands (repeated):

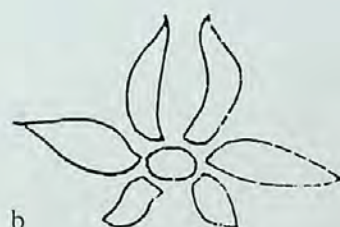
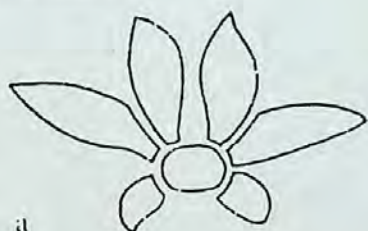
عز مولانا السلطان الملك الناصر

Glory to our master, the sultan al-Malik al-Nasir





A. Pope
Survey of Persian Art
 pl. 1005



J. Soustiel, La Ceramique Islamique
 p. 194, Fig. 10

Fig. 10 Exemples de représentations de fleurs de lotus au XIV^e siècle en Iran

- a, b) Sur des bols à décor gris et bleu sous glaçure de type «Sultani»
- c) Sur une plaque de revêtement à décor à reflets métalliques, de type «Kâchân», datée 1312
- d) Sur un plat à décor noir et bleu sous glaçure de type «Sultani»

Fig. 13



A. Pope, Survey of Persian Art 11
pl. 999



a

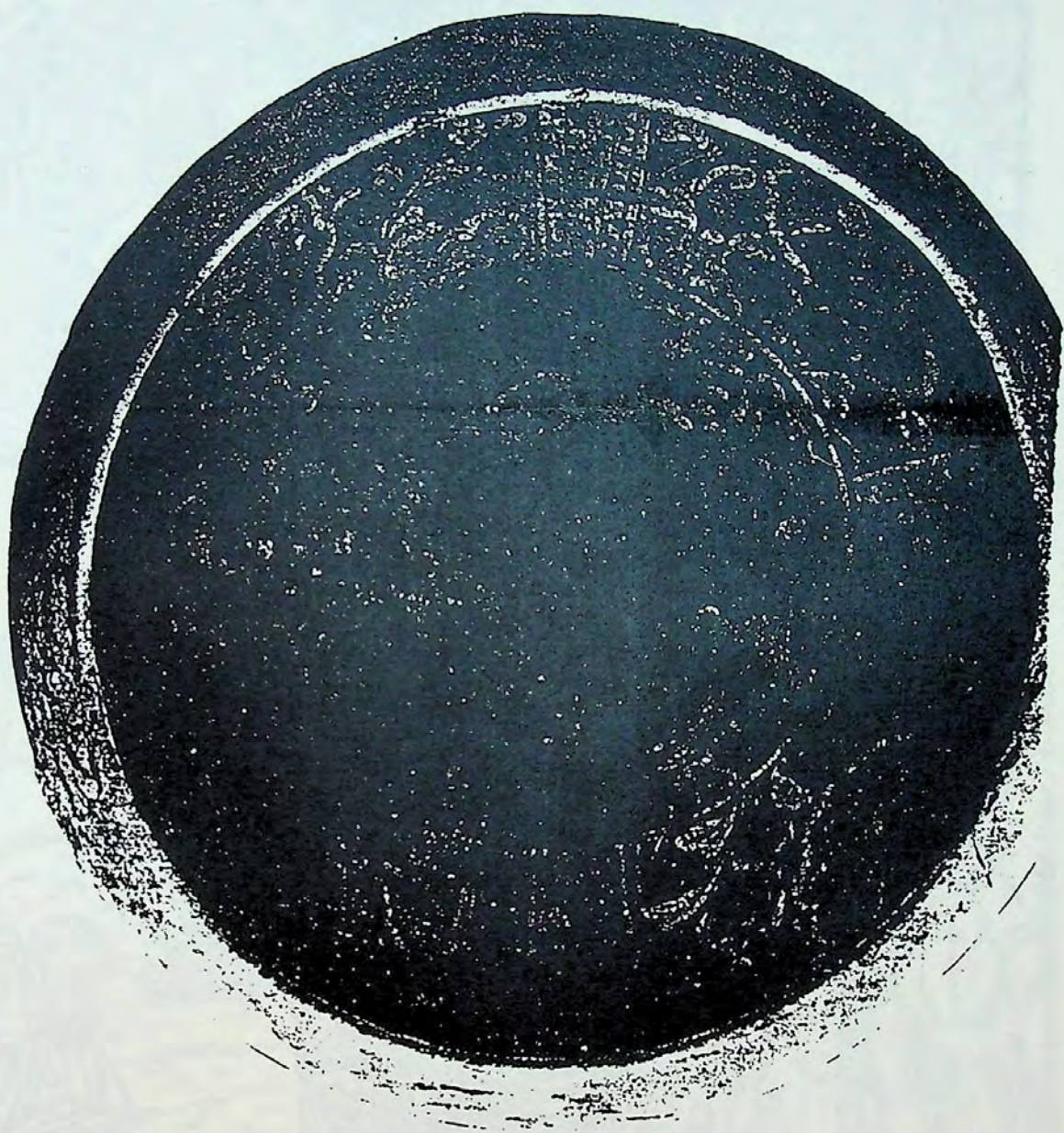


b

J. Soustiel, La Ceramique Islamique
p. 194, Fig. 11

Fig. 11 Exemples de représentations animées
a, b) Phénix en vol sur des coupes de type «Sultanabad». Début
XIV^e siècle. Musée du Louvre, Paris (a) et Ashmolean Museum

Fig. 14

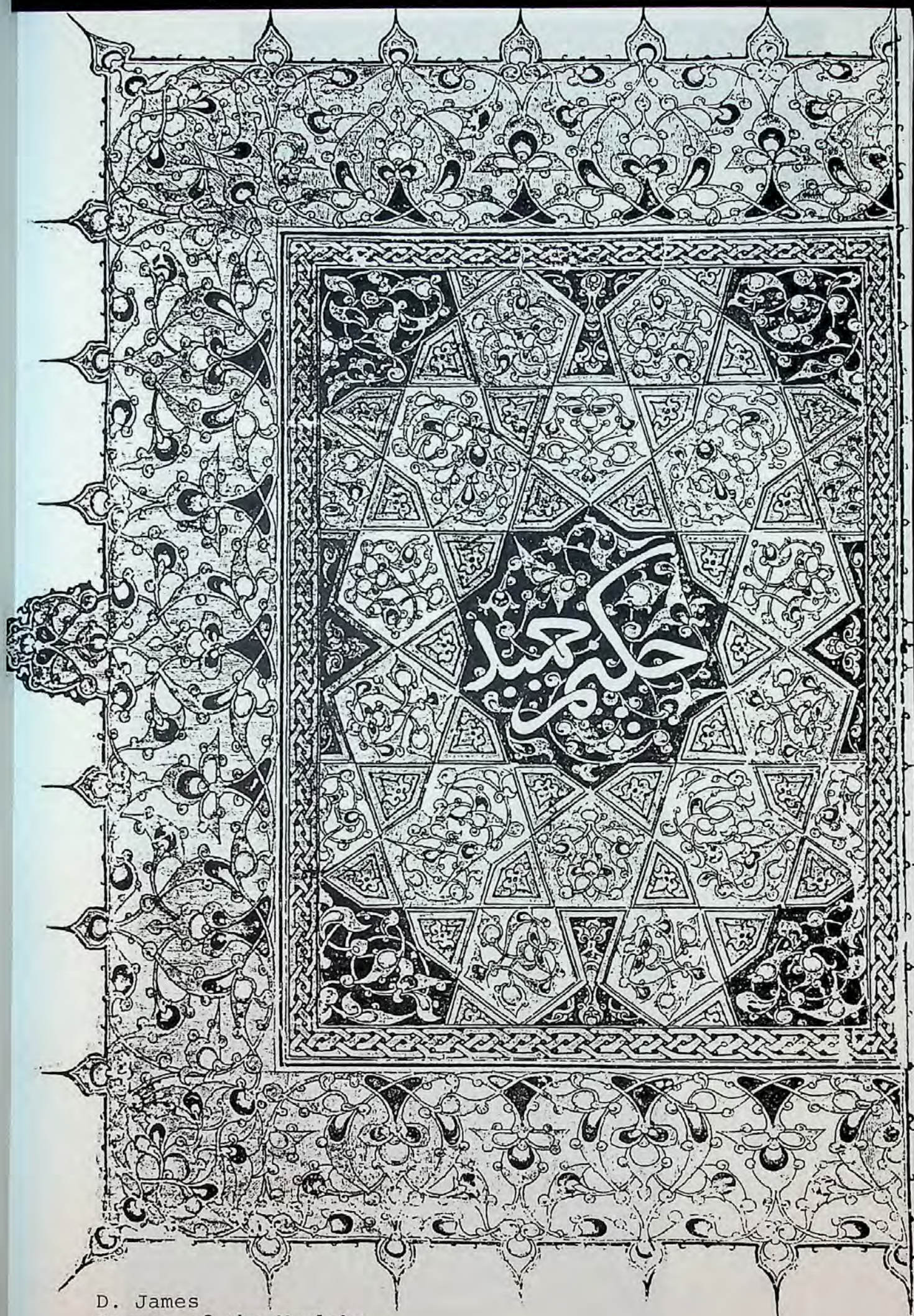


Dikran Khan Kelekian Collection
Paris, 1910 pl. 65

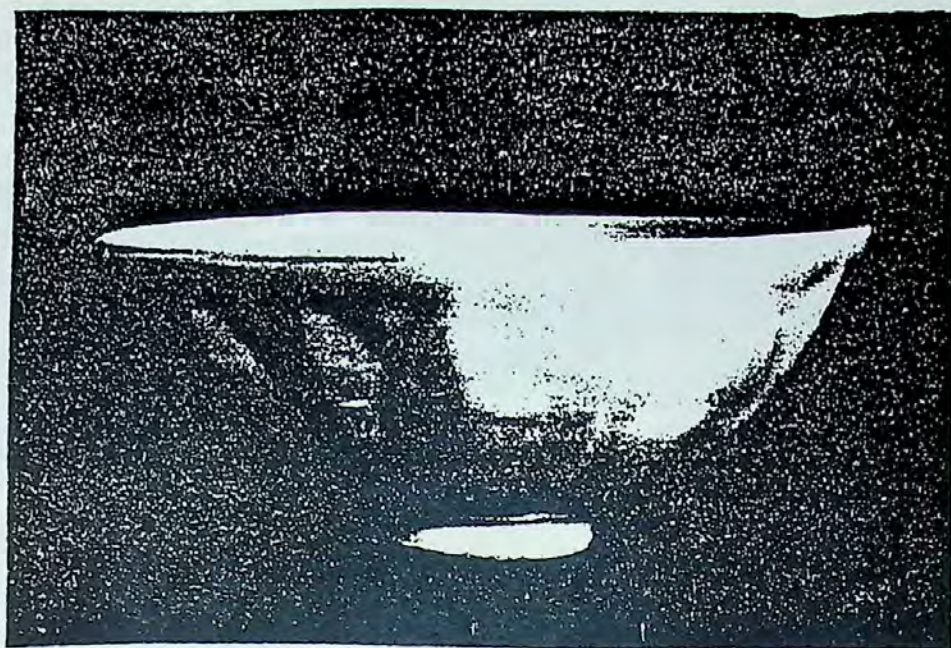
Fig. 15



. Inal
Some Miniatures of the Jami Al-Tavarikh in Istanbul,
opkapi Museum, Hazine Library No. 1654"
rs Orientalis 5, 1963 Figs. 4 and 6



D. James
Qurans of the Mamluks
Fig. 32



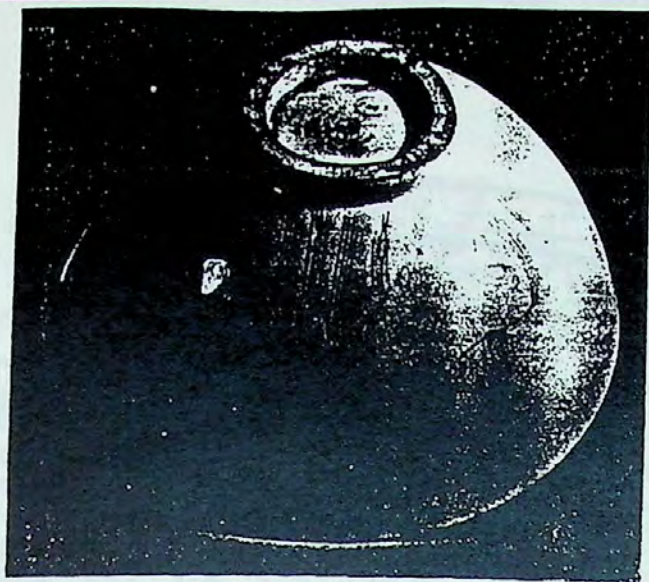
A.



B.



M. Medley, Yuan Porcelain and Stoneware
pl. A.



A.



B.

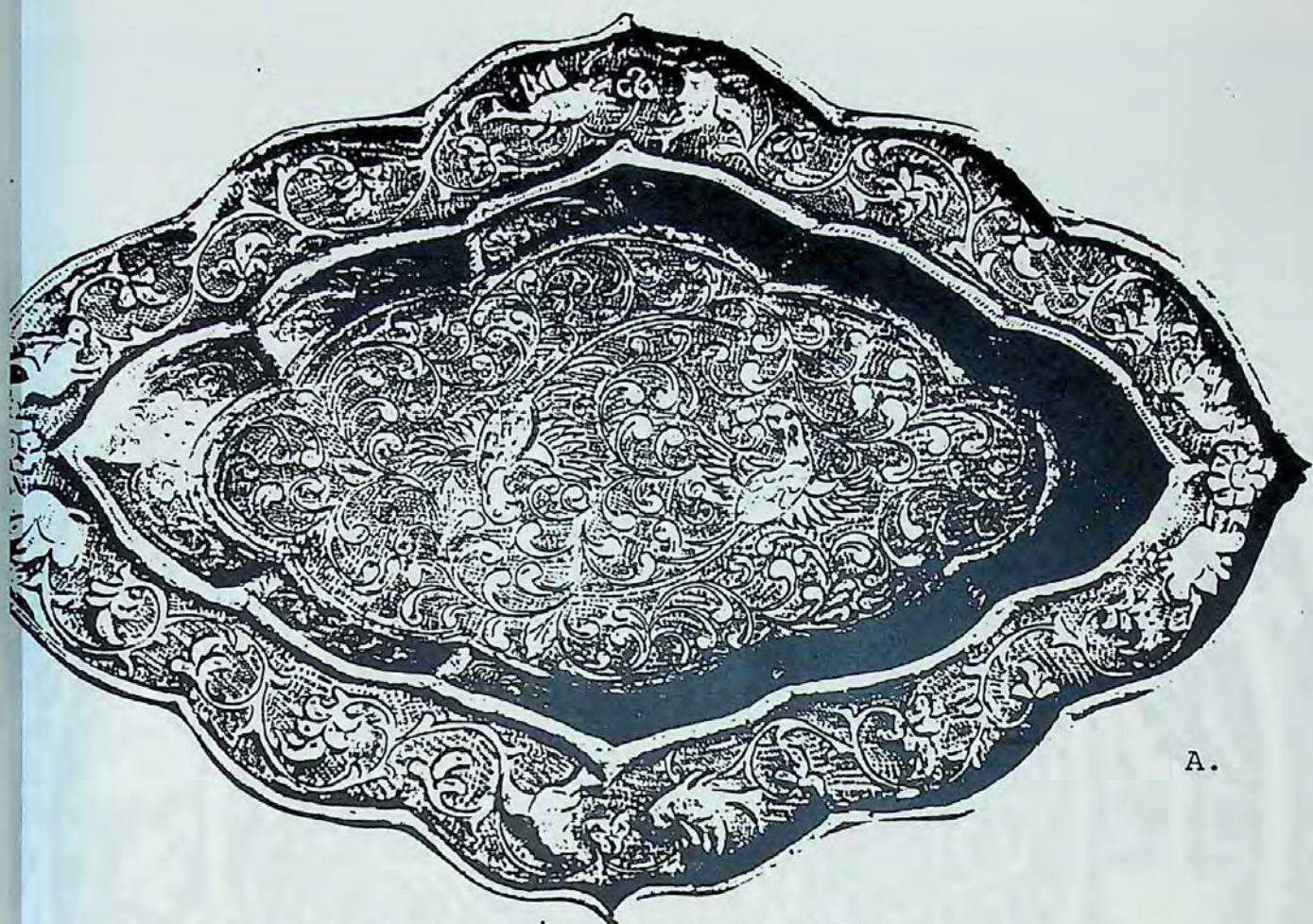


C.

J. Ayers, "Some Characteristic Wares of the Yuan Dynasty"
Oriental Ceramic Society Transactions 29, 1954-5
 pl. 38, Figs. 13 and 14



Stone relief found at the site of the
Yuan Dynasty capital, Padu, at Peking



A.

Silver dish said to have been found at
Beihuangshan, near Xi'an, 10th Century.

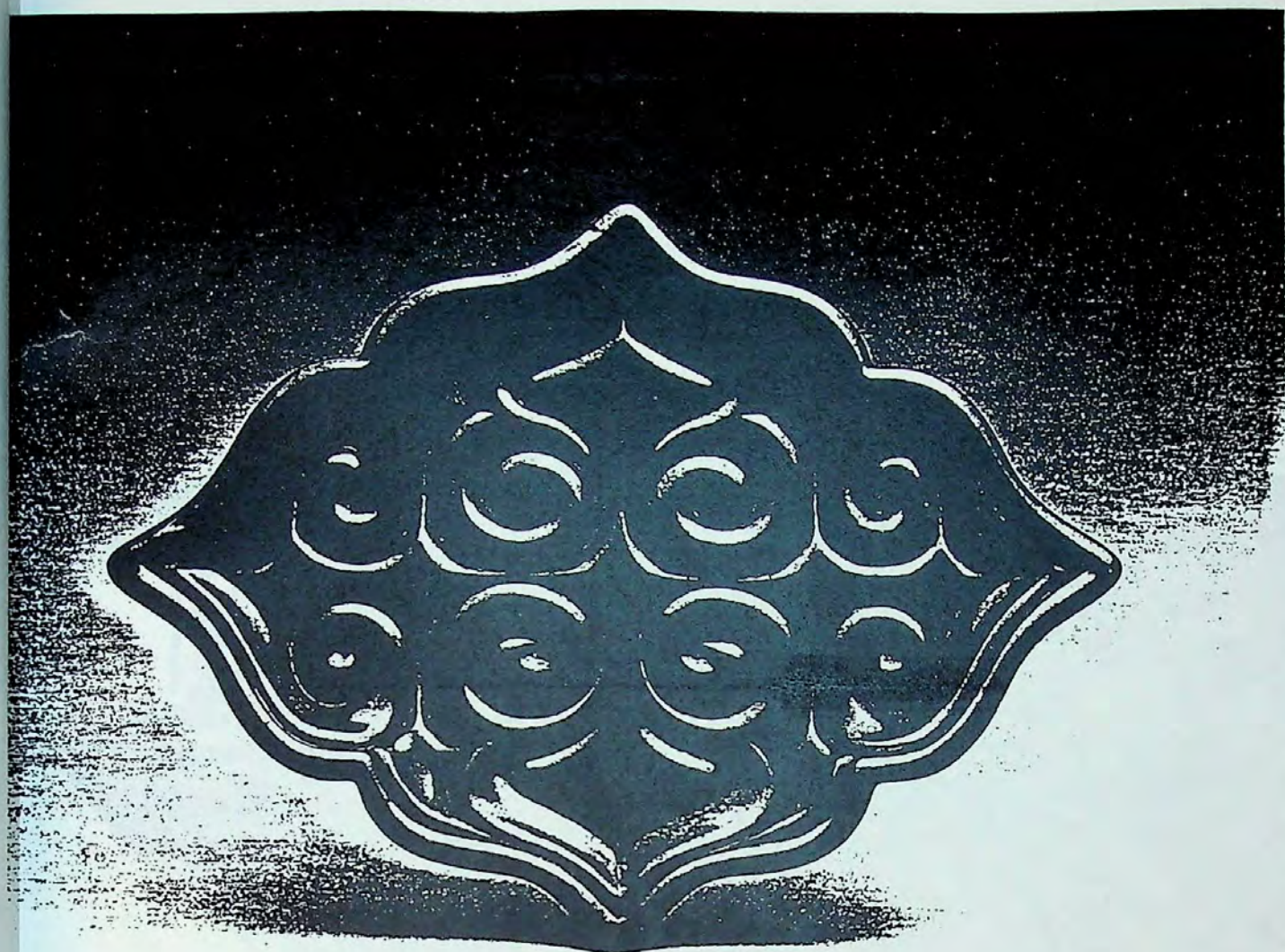


B.

Lacquer box decorated in qiangjin,
Yuan Dynasty, early 14th Century.



Procelain dish decorated in underglaze blue, with a pair of phoenixes among clouds within a lobed and pointed frame, Yuan Dynasty, 14th Century.



Carved lacquer dish, Yuan Dynasty, 14th Century.
Red and black lacquer on wood.

A. Yonemura
"The Art of Chinese Lacquer" Asian Art 1, 1988
Fig. 14, Arthur M. Sackler Gallery,
Smithsonian Institution
S87.0395

Fig. 25



Dikran Khan Kelekion Collection
Paris, 1910
pl. 72

Fig. 26



Dikran Khan Kelekian Collection
Paris, 1910
pl. 39

Fig. 27



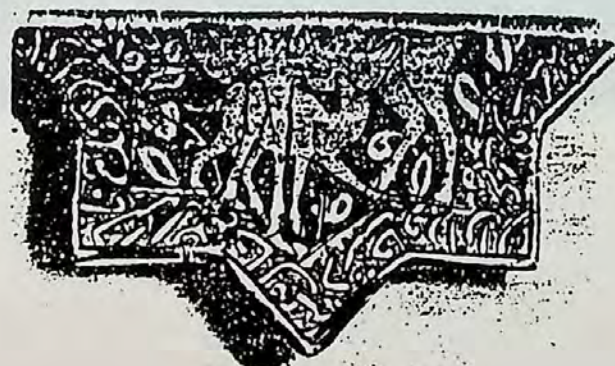
Dikran Khan Kelekian Collection
Paris, 1910
pl. 51

Fig. 28



A.

Dikran Khan Kelekian Collection
Paris, 1910
pl. 52



B.

R. Ettinghausen, "Dated Persian Ceramics
in some American Museums (conclusion)"
Bulletin of the American Institute for Persian
Art and Archaeology 4, 1936, fig. 7

Fig. 29



F. Sarre
Die Kunst des alten Persien fig. 97

Fig. 30

Chapter Two

FOOTNOTES

1. A. Lane, "Exhibition of Early Islamic Wares", Oriental Ceramic Society (1950), Introduction.
2. See TAVO map BVIII 15, Iran - The Il-Khanid Empire, Eastern Part.
3. Howorth, op. cit., p. 560.
4. Ibid., p. 582.
5. Boyle, op. cit., pp. 308-9.
6. V. Minorsky, "Sultanabad", The Encyclopedia of Islam 4, p. 547.
7. Pope, SPA 4, p. 1631.
8. Ibid., loc. cit.
9. Pope, op. cit., p. 1632.
10. See SPA 9, pls. 759, 762, 772-80 and Dikran Khan Kelekian Collection of Persian and Analogous Potteries, (1910), pl. 9 ff; subsequently referred to as Kelekian collection.
11. D. Rhodes, Clay and Glazes for the Potter, p. 82.
12. Ibid., loc. cit.
13. Ibid., p. 202.
14. Ibid., p. 284.
15. J. Allan, "Abu'l-Qasim's Treatise on Ceramics", Iran 11, (1973), pp. 111-20.
16. Rhodes, op. cit., p. 50 and 196.
17. A northern Syrian origin for the lakabi wares is argued by V. Porter, Medieval Syrian Pottery (1981), pp. 35-6. Also note two lakabi pieces attributed to Syria in E. Grube, Islamic Pottery of the Eighth to the Fifteenth Century in the Keir Collection, nos. 220 and 221.

18. O. Watson, "Persian Silhouette Ware and the Development of Underglaze Painting", Decorative Techniques and Styles in Asian Ceramics, (1979), pp. 86-103.
19. Pope, SPA 4, p. 1632.
20. A. Lane, LIP, pp. 10-13.
G. Reitlinger, "Sultanabad", Oriental Ceramic Society Transactions 20, (1944-5), pp. 25-34.
21. Rhodes, op. cit., p. 309.
22. V. Porter, op. cit., p. 5.
23. Lane, EIP, pls. 26B and 52A and A. Caiger-Smith, Lustre Pottery, figs. 34 and 35. Also compare large seated figures in Lane, EIP, pl. 27A with SPA 9, pls. 633A and 635D.
24. Lane, LIP, p. 13.
25. Ibid., pp. 11 and 13.
26. Ibid., pls. 2 and 3.
27. Ibid., pls. 1, 4, and color plate A.
28. E. Atil, Ceramics from the World of Islam, pls. 52-6.
29. Lane, op. cit., pl. 2a, SPA 9, pl. 780A, and Kelekian collection, pls. 53 and 57.
30. Lane, LIP, pls. 1, 2B, 3, and 4, SPA 9, pl. 780B, and Kelekian collection, pl. 59.
31. SPA 9, 779A and B, Kelekian collection, pls. 54 and 55.
32. A. Pope, "Representations of Living Forms in Persian Mosques", Bulletin of the Iranian Institute 6 (1946), pp. 125-9.
33. Ipsiroglu, op. cit., p. 29.
34. Grube, op. cit., no. 209, SPA 9, pls. 776-7, and 778A, Lane, LIP, pl. 2B, and Kelekian collection, pl. 50.
See also Figs. 5 and 8 herein.
35. Atil, op. cit., pl. 70, SPA 9, pls. 775A and 778A, Grube, op. cit., nos. 203, 205, and 207, and Kelekian

collection, pls. 51-2, and 54-5. See also Fig. 6 herein.

36. Kelekian collection, pl. 63.
37. Collection de M. J. M...de Teheran, Art Persan (1922), pl. 11, fig. 87. See also Grube, op. cit., no. 208, and the central panel from a hunt series depicting a deer and hound in the Kelekian collection, pl. 60.
38. SPA 9, pls. 779A, 780A and B, Grube, op. cit., no. 203, and Lane, LIP, pls. 1 and 4.
39. The Al-Sabah Collection, Islamic Art in the Kuwait Museum, pl. 80, and Kelekian collection, pl. 49. See also Fig. 7 herein.
40. R. L. Hobson, A Guide to the Islamic Pottery of the Near East, fig. 68, Grube, op. cit., no. 203, and Kelekian collection, pls. 53 and 57.
41. Compare Lane, LIP, pls. 2 and 4.
42. "L'art musulman a l'exposition de Munich", L'art Decoratif 149 (1911), p. 101.
43. Lane, LIP, pl. 4, Hobson, op. cit., fig. 68.
44. Atil, op. cit., pls. 71 and 73, and SPA 9, pls. 775A and B.
45. Ceramiques Islamiques (Geneve, 1981), Musee d'art et d'histoire, fig. 88.
46. Y. Tabbaa, "Bronze Shapes in Iranian Ceramics of the Twelfth and Thirteenth Centuries", Mugarnas 4 (1987), figs. 1-26.
47. Ibid., fig. 1-A, Lane, EIP, pl. 92B.
48. Ibid., fig. 1-B, Lane, EIP, pls. 86, 87B, and 90B.
49. Lane, LIP, p. 10. For examples, see Lane, EIP, pls. 64A, 75A, 93, and 96B.
50. Grube, op. cit., no. 209, Atil, op. cit., pl. 70, and Lane, LIP, pl. 4.
51. Grube, op. cit., no. 205 and 206, Lane, LIP, pl. 6B.

52. J. W. Allan, "The History of So-Called Egyptian Faience in Islamic Persia: Investigations into Abu'l-Qasim's Treatise", Archaeometry 15 (1973), p. 170 and pl. 4.
53. A. Caiger-Smith, op. cit., p.74.
54. Grube, op. cit., no. 207, Atil, op.cit., pl. 71, Lane, LIP, pl.1, and SPA 9, pl. 777B.
55. Art Islamique dans les collections privees libanaises, Musee Nicolas Ibrahim Sursock, pl. 88.
56. Caiger-Smith, op. cit., p. 74.
57. M. Whitman, "The Scholar, the Drinker, and the Ceramic Pot-Painter", Content and Context of Visual Arts in the Islamic World, p. 255-60.
58. Spuler, op. cit., p. 89.
59. Howorth, op. cit., p. 488.
60. Lane, LIP, p. 3.
61. Ibid., pp.4-5. For examples, see SPA 11, pls. 996, 1001A, B, and C, and 1002-4.
62. Ibid., p. 5.
63. SPA 11, pl. 1005A. See discussion of Sultanabad types, Chapter Two herein.
64. SPA 11, pls. 1001A and B.
65. See discussion of Sultanabad types, chapter 2 herein.
66. G. Inal, "Artistic Relationship between the Far and the Near East as Reflected in the Miniatures of the Gami' At-Tawarih", Kunst des Orients 10 (1975), p. 109.
67. D. Rice, Islamic Art (1975), p. 114-5, ill. 112.
68. B. Gray, Persian Painting, see illustrations on pp. 20-1.
69. Ibid., p. 21.
70. Inal, op. cit., p. 113.
71. Gray, op. cit., pp. 24-5, Rice, op. cit., ill. 114.

72. Inal, op. cit., p. 135. See Lane, LIP, pl. 2B, SPA 9, pls. 776 and 777A.
73. G. Inal, "Some Miniatures of the Jami' Al-Tavarikh in the Istanbul, Topkapi Museum, Hazine Library No. 1654", Ars Orientalis 5 (1963), fig. 8.
74. O. Watson, "Ceramics", Treasures of Islam, pls. 200 and 232.
75. D. James, Qurans of the Mamluks, fig. 82.
76. Ibid., figs. 80 and 81.
77. See Chapter Two herein, (VI INFLUENCES, A. TEXTILES) for discussion of "panel style".
78. James, op. cit., fig. 81.
79. M. Medley, The Chinese Potter: A Practical History of Chinese Ceramics (1976), pp. 169-70.
80. Ibid., p. 170.
81. M. Medley, "Islam, Chinese Porcelain and Ardabil", Iran 13 (1975), p. 32.
82. Medley (1976), op. cit., pp. 170-1.
83. Medley (1975), op. cit., pp. 32-3.
84. Medley (1976), op. cit., pp. 146-7.
85. Lane, LIP, p. 10.
86. M. Medley, Yuan Porcelain and Stoneware (London, 1974), p. 69.
87. Medley (1976), op. cit., p. 165.
88. Medley (1974), op. cit., p. 20.
89. Medley (1976), op. cit., fig. 126.
90. Ibid., p. 168.
91. J. Ayers, "Some Characteristic Wares of the Yuan Dynasty", Oriental Ceramic Society Transactions 29 (1954-5), p. 77.

92. Medley (1974), op. cit., p. 114, Ayers, op. cit., p. 84.
93. J. Rawson, Chinese Ornament The Lotus and the Dragon, pp. 35-62.
94. Ibid., p. 77.
95. D. Barrett, "Oriental Antiquities The Garner Collection of Lacquer", The British Museum Yearbook 1 (1974), p. 239.
96. A. Yonemura, "The Art of Chinese Lacquer", Asian Art 1 (1988), figs. 9, 10, and 11.
97. Ibid., figs. 5-8, R. Ettinghausen and Oleg Grabar, The Art and Architecture of Islam 650-1250, p. 104, fig. 80.
98. R. Ettinghausen, "Dated Faience", SPA 4, pp. 1667-96.
99. Lane, LIP, p. 10.
100. Atil, op. cit., pl. 74.
101. J. Winter and W. T. Chase, "Condition and Treatment", Pottery microfiche file, 09.317, S.I. 1334, L. 1945, N.E.P. 269, Sackler Museum, Smithsonian Institution.
102. Atil, op. cit., pl. 77.
103. SPA 9, pl. 759, Kelekian collection, pl. 111.
104. R. Ettinghausen, "Dated Persian Ceramics in some American Museums {Conclusion}", Bulletin of the American Institute for Persian Art and Archaeology 4, (1936), pp. 224-5.
105. Grube, op. cit., pp. 261-8.
106. J. W. Allen, "Abu'l-Qasim's Treatise on Ceramics", Iran 11 (1973), p. 14.
107. K. Erdman, "A Note on so-called Mina'i Faience", Bulletin of the American Institute for Persian Art and Archaeology 4 (1936), p. 218.
108. A. Caiger-Smith, Lustre Pottery, p. 74.

109. R. Ettinghausen, "New Affiliations for a Classical Persian Pottery Type", American Institute for Persian Art and Archaeology (1984), pp. 1068-71.
110. O. Watson, "Persian Lustre-painted Pottery The Rayy and Kashan Styles", Transactions of the Oriental Ceramic Society 40 (1973-5), pp. 1-13.
111. Caiger-Smith, op.cit., p.59.
112. S. Melikian, "The Sufi Strain in the Art of Kashan", Oriental Art 12 (1966), pp. 254-6.
113. O. Watson, Persian Lustre Ware (1985), p. 104.
114. A. Pope, "New Findings in Persian Ceramics of the Islamic Period", Bulletin of the American Institute for Iranian Art and Archaeology 5 (1937), pp. 149-53, fig. 1.
115. R. Ettinghausen, "Evidence for the Identification of Kashan Pottery", Ars Islamica 3 (1936), figs. 2a,b,f, and j.
116. Watson (1985), op. cit., pp. 110-11.
117. Ettinghausen (1936), op. cit., pp. 426-7, fig. 31.
118. M. Bahrani, Gurgan Faïences and review by A. Lane, Oriental Art 2 (1950), pp. 164-5.
119. Watson (1973-5), op. cit., p. 2.
120. D. Rice, "Some Wasters from Sultanieh", The Burlington Magazine 60 (1932), pp. 252-3.
121. F. Matson, a review of "The Ceramic Art in Islamic Times. C. Techniques", Ars Islamica 8 (1941), pp. 59-63.
122. These points also made by U. Schultze-Frentzel and H. Salge, "Glazes and Decorating Colors [sic] of Persian Islamic Ceramics Examined by X-Radiography, and Transparent Seljuq Glazes examined by Electron-Probe Microanalysis", Kunst des Orients 10 (1975), pp. 80-90.
123. M. Rogers, "Ceramics", Arts of Persia, p. 256.
124. Ibid., loc. cit.

125. Sackler Gallery, Washington, D. C., Microfiche file,
nos. 09.132, 09.111, 09.317, 47.9, 09.74, and 09.316.

THE SULTANABAD STYLE OUTSIDE PERSIA

The transmission of artistic impulses across vast distances is a visible result of political, economic, or social upheaval. An exchange not only of trade, but artistic ideas as well, occurred on a vast scale with the Mongol invasions. The influence of the Sultanabad style was felt in South Russia, Syria, Egypt, and later in Anatolia. A separate examination of each region is necessary.

1. SOUTH RUSSIA

The gradual adaptation of the nomadic steppe culture to the settled town existence is revealed through study of the cities of the Golden Horde. Material from intensive archaeological excavations of Teyken, Yul'yanakova, and Solov'yovskaya on the lower Volga form the basis of G. A. Fedorov-Davydov's recent book, *The Cities of the Golden Horde*. He recognized three ceramic classifications based on influences from other countries. Iran and Central Asia, secondly, the culture of Byzantium, Chersonesus, and the eastern Caucasus, and thirdly, the ceramics of the Far East, provided inspiration for the Volga potters. It is within the Class IV Kashan Ceramic Ware classification that an imitation of the Sultanabad style is evident.

Chapter Three

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The transmission of artistic impulses across vast distances is a visible result of political, economic, or social upheaval. An exchange not only of trade, but artistic ideas as well, occurred on a vast scale with the Mongol invasions. The influence of the Sultanabad style was felt in South Russia, Syria, Egypt, and later in Anatolia. A separate examination of each region is necessary.

I. SERAI BERKE

The gradual adaptation of the nomadic steppe culture to the settled town existence is revealed through study of the cities of the Golden Horde. Material from intensive archeological excavations of Tsarevo, Vodyanskoye, and Selitryonnoye on the lower Volga form the basis of G. A. Fyodorov-Davydov's recent book, The Culture of the Golden Horde Cities. He recognized three ceramic classifications based on influences from other countries. Iran and Central Asia, secondly, the culture of Byzantium, Chersonesus, and the eastern Caucasus, and thirdly, the countries of the Far East, provided inspiration for the Volga potter. It is within the Class I. Kashi Ceramic Ware classification that an imitation of the Sultanabad style is evident.

Similar to Lane's first Sultanabad division, a thick white slip provided the background for the designs, which were darkly outlined and accompanied by blue or turquoise spots. Again, reminiscent of the Sultanabad ware are the categories which comprise the decorative ornamentation. Floral, zoomorphic, geometric, and epigraphic motifs are characteristic.¹

At times the floral motif comprising the central medallion of a bowl is more geometric than naturalistic. (Figs. 31A, B, and C) Finely hatched or spotted backgrounds define floral decoration with different attempts at naturalism. (Figs. 31D and E) The ubiquitous Chinese lotus flower is easily recognized, and was frequently placed within concentric circles of dotted, comma-shaped leaf forms. (Figs. 32A and B)

Although comparatively rare, zoomorphic elements in the form of a sphinx, or more frequently an aquatic bird, are represented. (Figs. 33A and B) Zones of dotted, comma-shaped leaf elements surround the bird.²

The epigraphic motifs normally convey the Arabic word for "good fortune".³ Placed near the bowl rim, the stylized words closely resemble the naturalistic leaf forms below them. (Figs. 32A and 33A)

Geometrical division of bowl interiors was either according to concentric circles, as noted earlier, or via

radiating bands. These wedges were then filled with plant motifs. Similar bands may decorate the exterior bowl rims, with narrow vertical bands containing dots below. (Figs. 34A and B) Radiating white petal motifs can also comprise exterior ornamentation.⁴

The Volga potters no doubt experienced some difficulty in the formation of the Kashi vessels, due to the high silica content in the clay body. This problem was remedied, as it had been in Persia, with the use of moulds.⁵ Equally interesting was the discovery of a potter's shop at the Selitryonnoye site, which bore marked resemblance to the Persian "karkhana". During the Mongol period, these large factories utilized forced labor in different capacities working under a single overseer.⁶

II. SYRIA

If the 'Tell Minus' ware is the finale of Egyptian Fatimid lustre, then this mid twelfth century Syrian type would provide the missing link to the subsequent ceramic revolution in Persia. (Fig. 35) Four factors suggest this explanation. The use of the frit body, vessel shapes, motifs employed, and the lustre technique itself are all highly reminiscent of the products from the potter's quarter in Fustat prior to its destruction.⁷

A possible thread of continuity is suggested in the rendering of the animal motifs in the 'Tell Minis' lustre and the later Raqqa underglazed wares.⁸ Although the Mongols sacked Raqqa in 1259, influence from their technically diverse and high quality ceramics continued into the fourteenth century.⁹

Fragments and vessels excavated from the Hama citadel have shown remarkable design similarity with the Raqqa wares.¹⁰ A dual influence is apparent, for the Raqqa ornamentation was painted onto shapes common to late thirteenth and fourteenth century Persia.¹¹ (Figs. 36B,C, and D) Simultaneously, the opposite occurred, with traditional Syrian shapes ornamented in the blue and black color scheme of Lane's first Sultanabad type. (Fig. 37)

The Syrian clay body was whiter and harder than that used in Persia, and the potting of these wares tended to be

heavier. Underpainting of blue, black, and occasionally Raqqa brownish-red, was covered with a thick, transparent glaze which tended to crackle.

Highly representative were the large vases and albarelli shapes, which had originally contained exotic spices and fruits exported to the European apothecaries.¹² (Fig. 38) Particular only to Syria was a low, ogee-shaped bowl with a small, vertical rim.¹³ In addition to the previously mentioned shapes derived from Raqqa and Persia (Figs. 36A-E), a pedestal bowl with outwardly flaring sides is found. (Fig. 39) The distinctive, angular profile of this vessel was ultimately derived from Cypriot ceramics.¹⁴ Sgraffito and slip-painted bowls of this particular shape were produced in fourteenth century Mamluk Egypt.¹⁵

Spatial division of the surface of the Syrian underglazed vessels followed the Sultanabad format. Bowl interiors were divided into radiating wedges with floral forms, inscriptions, hatched, or dotted areas.¹⁶ The division into concentric circles and subsequent ornamentation of the Persian bowl in Fig. 40 is reflected in the Syrian vessel in Fig. 41. Wide and narrow bands serve to emphasize the contours of the large jars and albarellos. (Fig. 42) These may be further subdivided into zones with cartouches of inscriptions, floral forms, heraldic devices, hatched or dotted areas.¹⁷

Analysis of several fragments in the Metropolitan Museum of Art revealed them to have originated from a common Syrian clay source. Designs include both dotted and plain animals in foliage, as well as a single example of a human figure with decidedly Syrian features.¹⁸ A large aquatic bird is also frequently depicted.¹⁹ (Fig. 42)

The aforementioned 'window effect', where a fraction of the whole was viewed, is represented in Fig. 43.

Furthermore, Grube has described it as a transitional piece between the late thirteenth and fourteenth century three-color wares and the later Chinese-inspired blue and white wares.²⁰

III. EGYPT

Technical and design stimulus provided by imported wares was fundamental to the development of Egyptian ceramics. Chinese Ch'ing-pai, imported into early twelfth century Egypt, was partially responsible for the design ornamentation employed on Fustat Fatimid sgraffito.²¹ Likewise, the Lung-ch'uan wares were greatly admired and subsequently imitated by Egyptian potters.²²

Persian minai, lustre, silhouette, and Sultanabad wares were sources of inspiration as well. The Persian vessels were generally more thinly potted, which combined with their whiter, more compact clay body enabled them to be readily distinguished from their Egyptian imitations.²³ Sultanabad-inspired Syrian vessels, of similar quality and ornamentation, were not as easily distinguishable. (Fig. 44¹⁸² To minimize confusion, the original numbering of the prints has been used.) The financial justification for importing a product so similar to one being produced in Egypt is difficult to resolve.²⁴ An explanation may be provided by the migration of potters from Syria to Egypt, and their subsequent utilization of Syrian ornamentation in their work.²⁵

The granular Egyptian clay body tended to fire to a slightly grayish or buff tone. Blue, black, and occasionally pale green colors were painted directly onto

the body and then covered with a clear, alkaline glaze in the economical single-fired technique.

An artistic tradition of the rendering of birds and animals within foliage had previously existed in Fatimid and Ayyubid Egypt. (Figs. 45 and 46) The underglaze technique allowed complete brush freedom, and the Egyptian potter adeptly captured the essence of the animal or bird with a few well-drawn lines. (Figs. 47 and 48) The spontaneous quality of the foliage was frequently accentuated with a hatched, textural background. (Fig. 48)

Small bowls or dishes with flattened rims were ornamented in the blue and black 'panel' style. Delicately drawn, stylized plants in reserve against solid blue backgrounds were placed within central medallions. Radiating wedges were filled with stylized foliage, inscriptions, or interlaced Y-shaped motifs. (Figs. 44^{#35}, 49^{#2} and 50^{#2}) Backgrounds of inverted Y-shapes were characteristic of the Mamluk Quranic illuminator, Muhammad ibn Mubadir. (Fig. 51) Bands of hatching or solid color separated the wedges.²⁶

Exteriors of vessels were ornamented with petal arcades near the foot, or bands of stylized foliage separated by vertical blue lines. (Figs. 49^{2bis} and 52^{1bis}) A quality of relief was achieved through application of heavy slip. This occurred on both the interiors and exteriors of vessels and was not confined to any particular type of decoration.

During the Mamluk period, the potters revived the Fatimid tradition of signing their wares. Due to wide discrepancies in style, the 'signatures' were deduced to have been particular names of workshops employing several artisans through the years.²⁷ One of the more common signatures, that of 'Ghazal', is rendered on the undersides of Fragments #1 and #2 herein.

Examination of the Sultanabad inspired fragments in the study room of the Islamic Museum has led to several observations. The glazed surfaces have the irridescent quality common to their Persian prototypes. A waster in the Sultanabad style, no. 10302/25 has a triangular stilt support, used for stacking vessels during the firing process, adhering to the glaze. Additionally, a technique used to smooth the angle between the foot rim and bottom of the vessel is apparent in another fragment, no. 5345/13. Traces of a rolled clay coil are clearly visible on the base. Further observation revealed this technique had been used on a number of bases, showing the potter's concern for refinement of the form.

IV. ANATOLIA

Artistic repercussions from the twelfth century Persian 'ceramic revolution' were felt in Anatolia as well. Fine lustre and underglaze wall tiles embellished the "Kubadabad Palace", constructed between 1226 and 1236 on the shore of Beysehir Lake.²⁸ Motifs depicted recalled Raqqa ornamentation, which was stylistically related to the products of Kashan and earlier Fatimid Egypt.²⁹

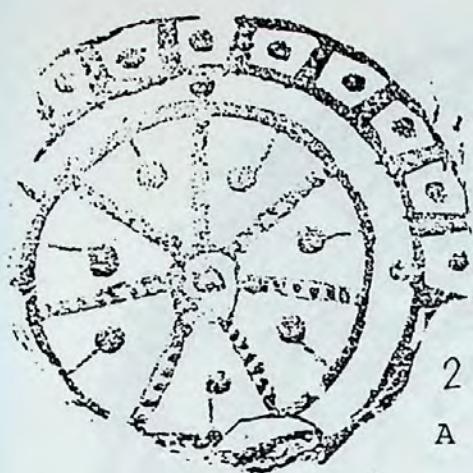
Excavations at Iznik have revealed an Anatolian fondness for ceramics in the Persian silhouette style.³⁰ Additionally, a type known as 'Miletus ware' was shown to have been produced there.³¹ Originally referred to as 'Island ware' due to the fragments found in the Aegean islands, the 'Miletus' label was affixed following German excavations in that city.³² Because of the numerous examples uncovered coupled with its widespread distribution, Miletus ware was no doubt a widely popular, mass produced product.³³

But, strangely a red earthenware body was used. It was then coated with a white slip, onto which underglaze decoration predominately in dark blue was painted. Black outlines and areas of light blue, turquoise, purple and green were also used. A transparent lead glaze covered the vessels, which were typically convex bowls or deep dishes.³⁴

It is in the decorative ornamentation of this ware that affinities with the Persian ceramics can be seen.

Reitlinger discussed the motival relationship between the Miletus and the Kubachi wares, and their linkage to the Varamin ceramics.³⁵ However, perhaps an even closer relationship exists between the ceramics of the Il-Khanid period and the Miletus wares. Comparison of Figs. 53A and B reveals a similar division of the interior bowl cavity based on interlacing arabesques, which are then filled with stylized foliage. Additionally, the scratched spirals filling the background spaces of the Miletus vessel recalls the "horror vacui of the Kashan style with its all-penetrating scroll work."³⁶

Lane noted two separate sources of inspiration for the fifteenth century Miletus ware. The geometrical divisioning largely recalled the 'panel style', while Chinese fourteenth century blue-and-white was influential for a type whose ornamentation was based on a central rosette with concentric bands of gadroons.³⁷ The result was a product purely Islamic in character.



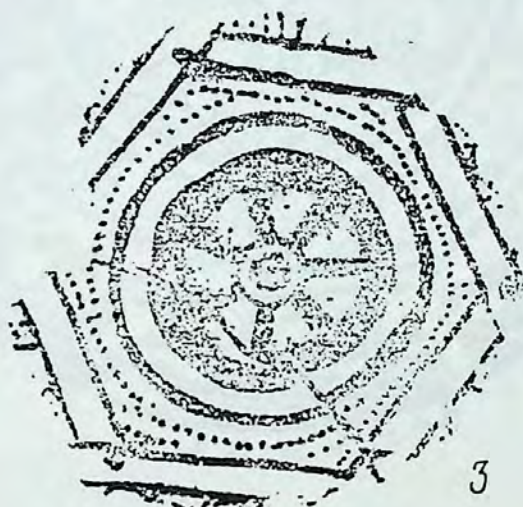
2

A



4

B



3

C



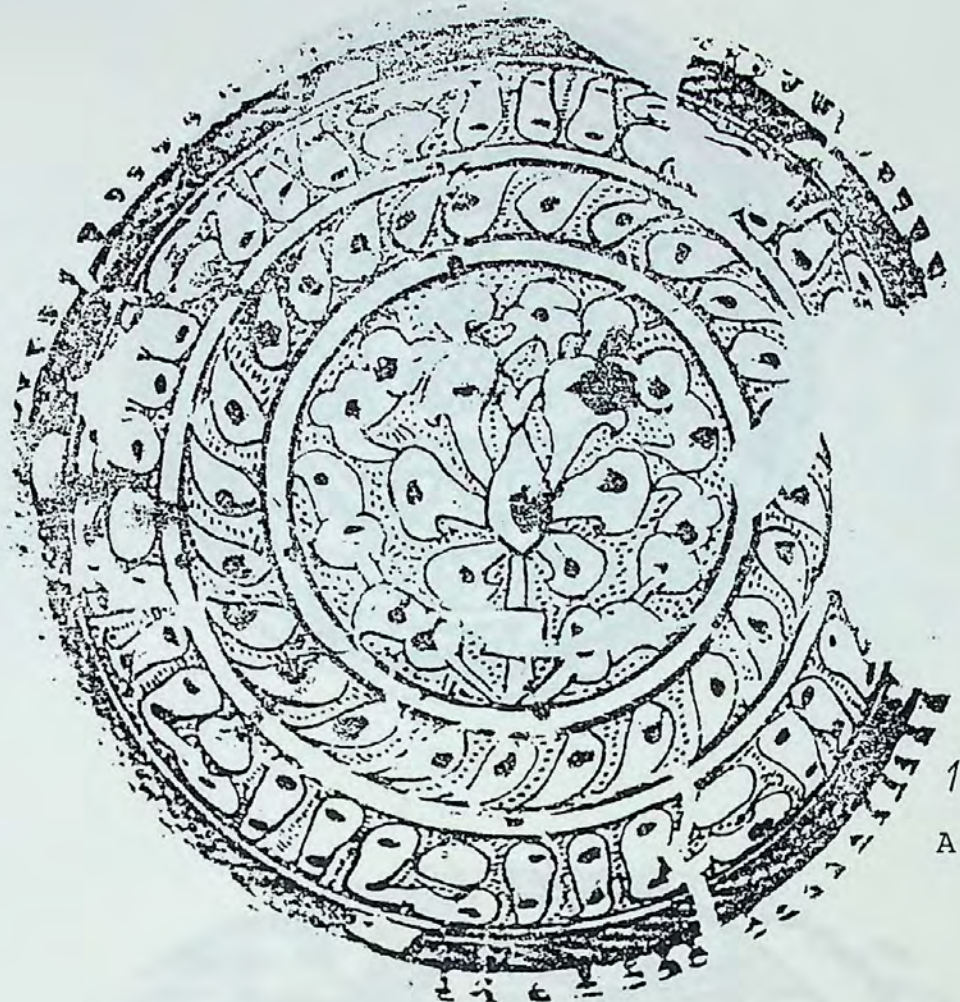
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D



4

E



1
A



5
B



A

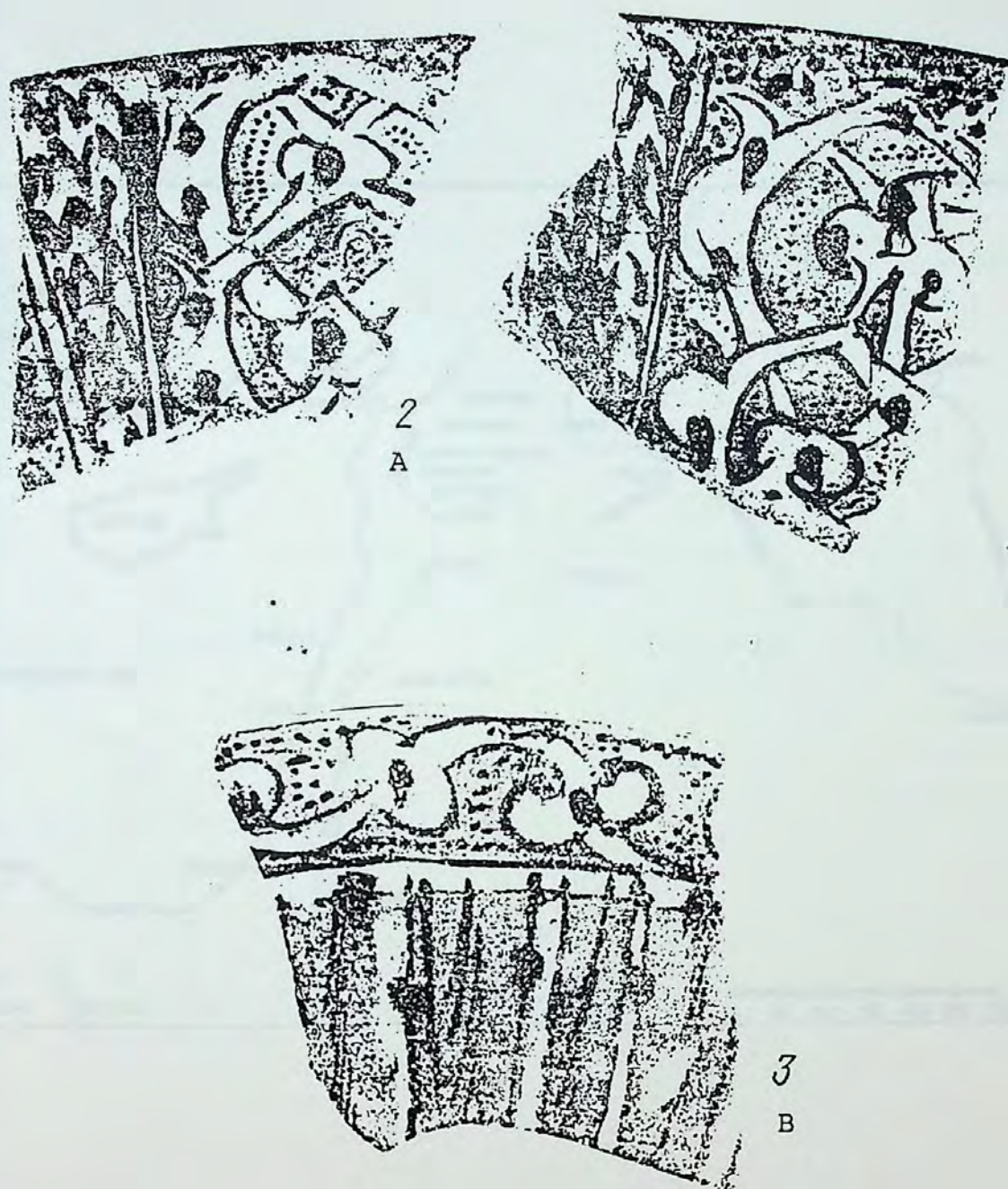


B

(A) R. Ettinghausen
Islamic Art and Archeology, fig. 24

(B) G.A. Fyodorov-Davydov, The Culture of the Golden Horde Cities
Illustration 9, fig. 1

Fig. 33



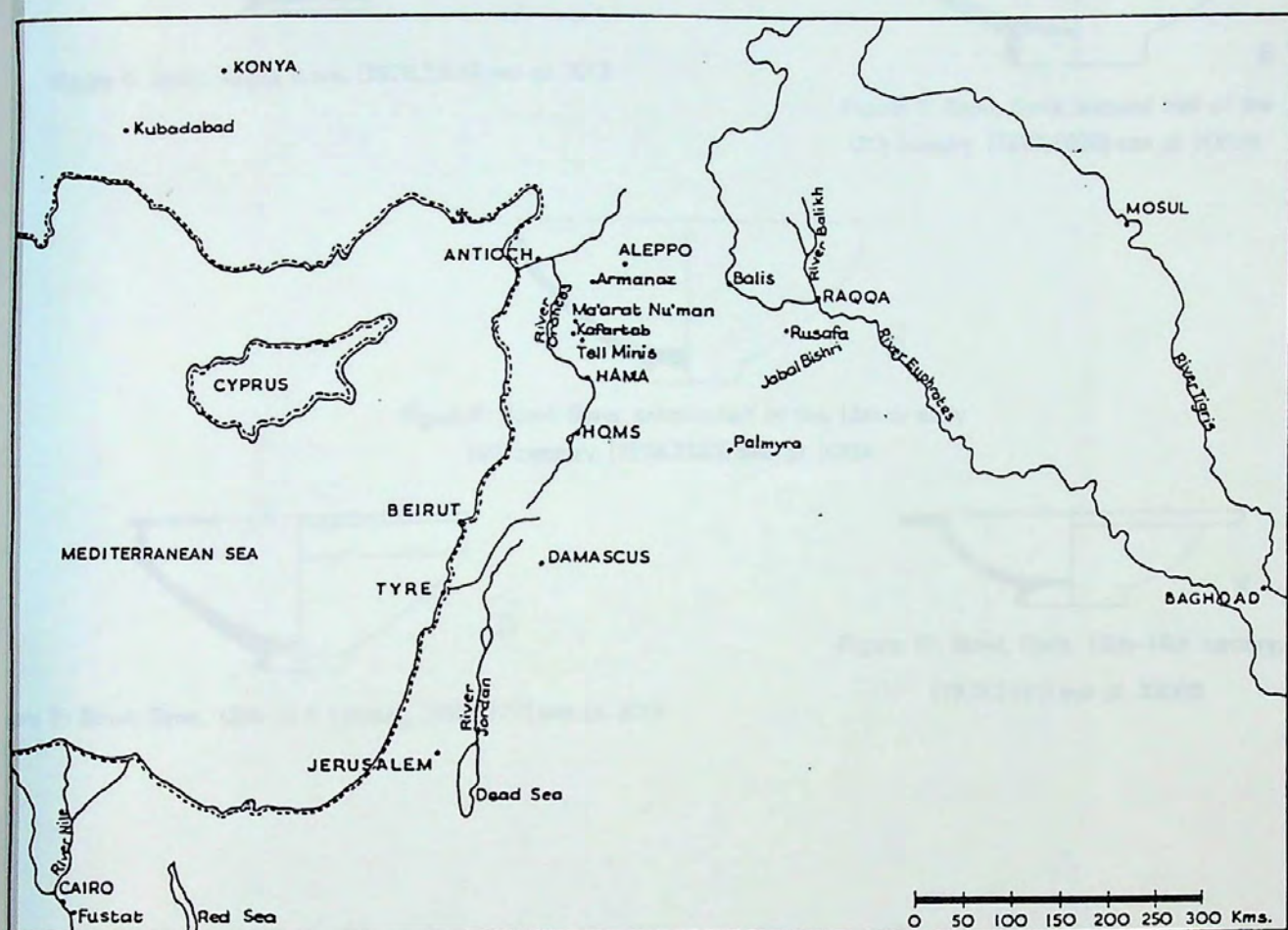




Figure 6: Bowl, Raqqa ware, [1978.2206] see pl. XXII

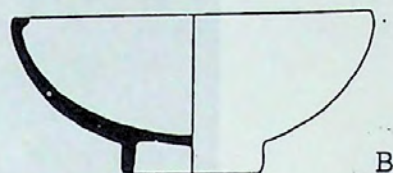


Figure 7: Bowl, Syria, second half of the 13th century, [1978.1698] see pl. XXVIII

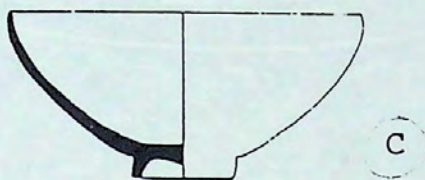


Figure 8: Bowl, Syria, second half of the 13th or early 14th century, [1978.2186] see pl. XXIX

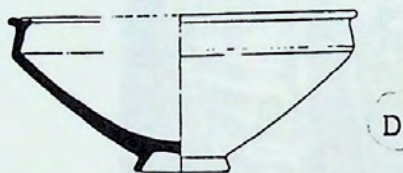


Figure 9: Bowl, Syria, 13th–14th century, [1956.177] see pl. XXX



Figure 10: Bowl, Syria, 13th–14th century, [1978.2191] see pl. XXXIII





M. Jenkins (ed.)
Islamic Art in the Kuwait National Museum
The al-Sabah Collection, pl. 81



M. Jenkins (ed.)
Islamic Art in the Kuwait National Museum
The al-Sabah Collection, pl. 82



Metropolitan Museum of Art
Madina Collection

Fig. 40



Metropolitan Museum of Art
Madina Collection

Fig. 41



Masterpieces in the Victoria and Albert Museum 1952
pl. 193

Fig. 42





77



78



79



79bis



80



81



82



83



81bis



85



Fig. 44



1



2



3



4



5



8

Aly Bahgat and F. Massoul
La ceramique musulmane de l'Egypte
pl. 32, figs. 1-8



3



6



2



5



1



4



7

Aly Bahgat and F. Massoul
La ceramique musulmane de l'Egypte
pl. 36, figs. 1-8

Fig. 46



3



6



2



5



1



4

Aly Bahgat and F. Massoul
La ceramique musulmane de l'Egypte
pl. 38, figs. 1-6

Fig. 47



Aly Bahgat and F. Massoul
La ceramique musulmane de l'Egypte
pl. 7



1



2 bis



3



4 bis



5



6



7 bis



8 bis



9



10

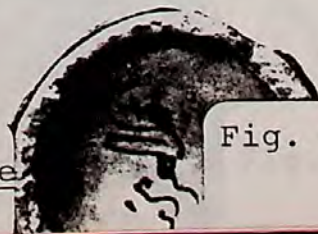


Fig. 49

Aly Bahgat and F. Massoul
La ceramique musulmane de l'Egypte
pl. 41, figs. 1-6



3



3 bis



4 bis



2



2 bis



4

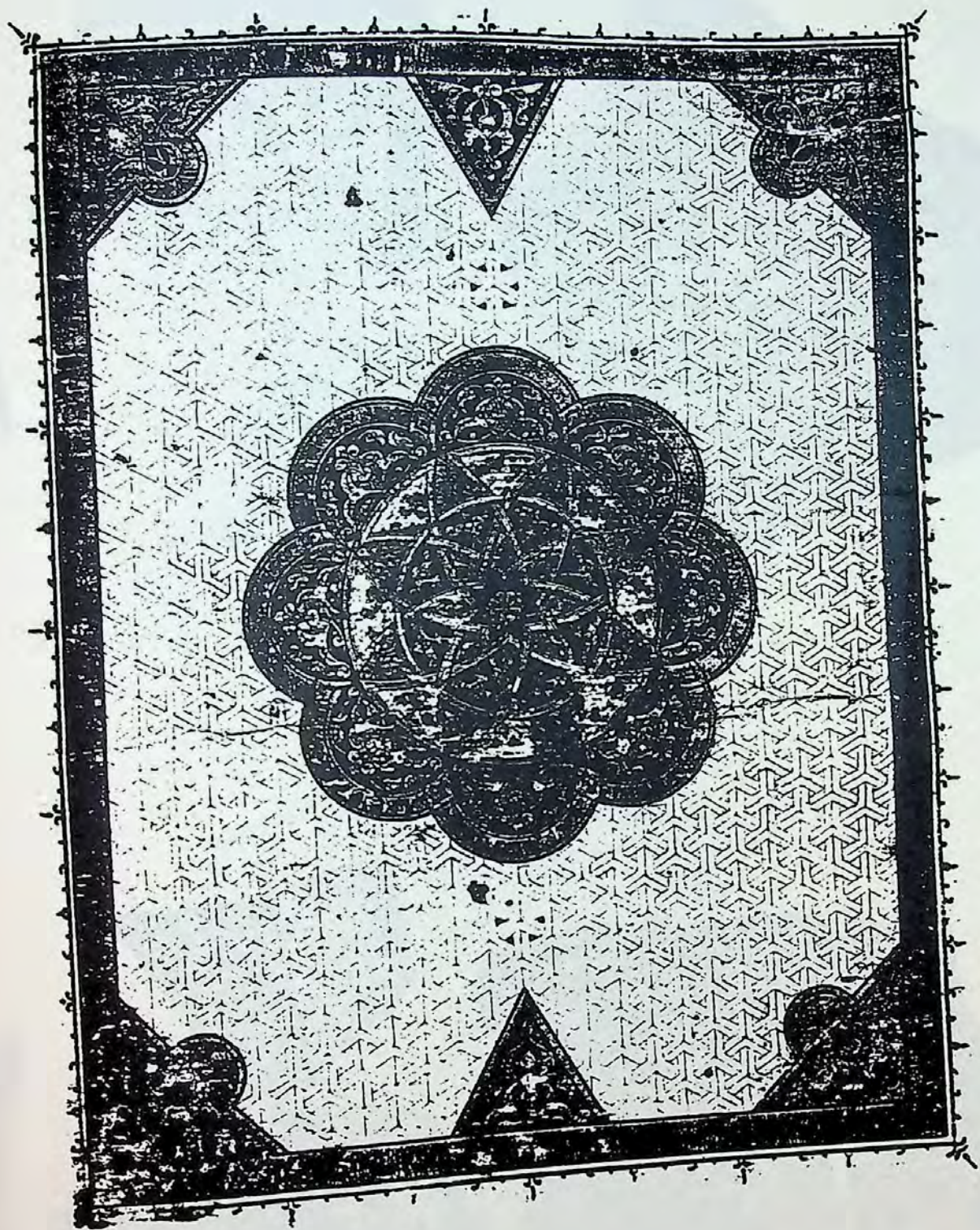


1



1 bis

Aly Bahgat and F. Massoul
La ceramique musulmane de l'Egypte
pl. 40, figs. 1-4



D. James
Qurans of the Mamluks
Fig. 28

Fig. 51



4 bis



Aly Bahgat and F. Massoul
La ceramique musulmane de l'Egypte



A. O. Watson
Persian Lustre Ware
 pl. 80a



B. A. Lane
Later Islamic Pottery
 pl. 17B

Chapter Three

FOOTNOTES

1. G. A. Fyodorov-Davydov, The Culture of the Golden Horde Cities, pp. 76-8.
2. Interior and exterior views of this bowl in Lane, LIP, pl. 5A and B.
3. Fyodorov-Davydov, op. cit., p. 78.
4. Lane, op. cit., loc. cit.
5. Fyodorov-Davydov, op. cit., p. 144.
6. Ibid., p. 157.
7. V. Porter and O. Watson, "'Tell Minis' Wares", Oxford Studies in Islamic Art 4 (1987), p. 189.
8. Ibid., p. 190, Porter (1981), op. cit., pls. 5 and 6.
9. See Porter (1981), op. cit., p. 3 ff. for description and examples of Raqqa ceramic types.
10. P. J. Riis, V. Poulsen, and E. Hammershaimb, Les verreries et poteries medievales: Hama, fouilles et recherches de la Fondation Carlsberg 1931-38, (Copenhagen, 1957), p. 204 ff.
11. Porter (1981), op. cit., pp. 40-2, pls. 28-30 and figs. 7-9.
12. Lane, LIP, pl. 10 and 11.
13. Ibid., pl. 12B.
14. Rice (1975), op. cit., ill. 133.
15. G. Scanlon, "Some Mamluk Ceramic Shapes from Fustat: 'Sgraff' and 'Slip'", Diamond Jubilee Volume of the Islamic Museum (Cairo, 1980), p. 60.
16. Lane, op. cit., pl. 12A. See additionally The Arts of Islam, Catalogue of an Exhibition at the Hayward Gallery (London, 1976), no. 315. The ornamentation is reminiscent of Persian ladjvardina wares.

17. Lane, op. cit., pl. 10.
18. M. Jenkins, "Mamluk Underglaze-Painted Pottery: Foundations for Future Study", Muqarnas 2 (1984), pp. 95-104, pls. 1-8.
19. Lane, op. cit., pl. 11.
20. Grube, op. cit., p. 292.
21. G. Scanlon, "Egypt and China: Trade and Imitation", in extract from Islam and the Trade of Asia (1970), p. 88.
22. Ibid., loc. cit.
23. G. Scanlon, "A Note on Fatimid-Saljuq Trade", extract from Islamic Civilization (1973), p. 271. See pls. 5d and 6a-c.
24. W. Kubiak, "Overseas Pottery Trade of Medieval Alexandria as shown by recent Archaeological Discoveries", Folia Orientalia 10 (1969), p. 29.
25. Jenkins, op. cit., p. 112.
26. Good examples can additionally be seen in A. Abel, Gaibi et les grands faienciers egyptiens d'epoque Mamlouke (Cairo, 1930)
27. Lane, op. cit., p. 112.
Refer to Lane's footnote #1 for specialized works listing signatures.
Additionally, see M. Jenkins, "Sa'd: Content and Context", Content and Context of Visual Arts in the Islamic World (Pennsylvania, 1988), pp. 67-90.
28. G. Oney, "Kubadabad Ceramics", The Art of Iran and Anatolia from the Eleventh to the Thirteenth Century A. D., pp. 68-84.
29. Porter (1981), op. cit., p. 10.
30. O. Aslanapa, Turkish Art and Architecture, pp. 278-9.
31. Ibid., p. 279.
32. N. Atasoy, Iznik: The Pottery of Ottoman Turkey, p. 82.

33. Ibid., p. 83.
34. Lane, op. cit., pp. 40-1.
35. G. Reitlinger, "The Interim Period in Persian Pottery: An Essay in Chronological Revision", Ars Islamica 5 (1938), pp. 164-72.
36. Ettinghausen (1936), op. cit., p. 410.
37. Lane, op. cit., p. 41.

Chapter Four

CATALOGUE OF SHARDS

The catalogue which follows describes twenty-one underglaze shards from the Pippin Collection and from the study collection emanating from the Fustat Expedition of the American Research Center in Egypt. Comparative material is cited to illustrate certain points concerning the fragments.

The inventiveness of the Egyptian potter as he experimented within the style is readily apparent. An artistic tradition of the rendering of birds and animals existed in Fatimid Egypt. The underglaze technique allowed more brush freedom, and the very personality of the artist was revealed at times. The technique of incising and the introduction of a pale green color were tested with satisfactory results. Various shapes were used; inspiration was drawn from earlier ceramics as well as other artistic mediums. The fragments represented include examples of floral, geometric, and zoomorphic motifs, and Arabic script used decoratively. Though not evident on all fragments, the potter's concern for the refinement of the form was visible in a number of the pieces.

Fragment #1

American University in Cairo/Pippin Collection No. 93

DESCRIPTION

The fragmentary base of a bowl has a definite circular outline, a result of its being ground down following excavation. The coarse, granular clay body has an off-white tonal quality. The potting is fairly uniform and thinness of the walls would indicate a small form. A slight tooling of the foot ring no doubt imparted a lighter, more graceful profile to the completed vessel. The pressure from the potter's fingertips is evident in the dipped central cavity, where a thickened pool of glaze has collected.

Underglaze ornamentation, which consists of a repeated eight petaled flower motif set in scrolled foliage, is covered with a transparent glaze. Outer tips of the petals are painted a deep blue, while the inner portion remains white. The scrolled pattern filling the space between the flower motifs has been incised through the dark slip background to reveal the clay body beneath. It appears to have been a conscious choice by the potter not to opt for the free-flowing quality of brushwork. The relief created by the jerky, angular lines has served to activate this intermediate space. Similar incised scrolling, often

accompanied with a central flower motif, is found on contemporary Mamluk ceramics.¹

There is evidence of other vessels having adhered to the exterior during the firing. An attempt was made to grind these down as well. Dark and light blue stripes were painted onto the outside of the foot ring. The glazed inner portion bears the name "Ghazal", the workshop where the vessel was produced.^{2 and 3} (Refer to Chapter Three, footnote 27 herein)

COMPARATIVE MATERIAL

1. A. Abel, Gaibi et les grands faienciers egyptiens d'epoque mamlouke (Cairo, 1930), pl. 4, figs. 15 and 16.
2. A. Bahgat and F. Massoul, La ceramique musulmane de l'Egypte (Cairo, 1930), pl. 41 fig. 1^{bis} ('Ghazal' signature) and pl. L fig. 90. Incised scrolling with a central floral motif is similar to the fragment's ornamentation.
3. Musee de l'art arabe du Caire, La ceramique Egyptienne de l'epoque musulmane (Frobenius S. A. Bale, 1922), pl. 128. 'Ghazal' and other common signatures depicted.



TODAY

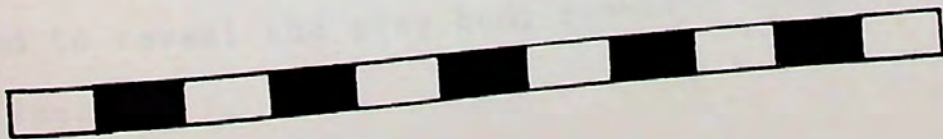
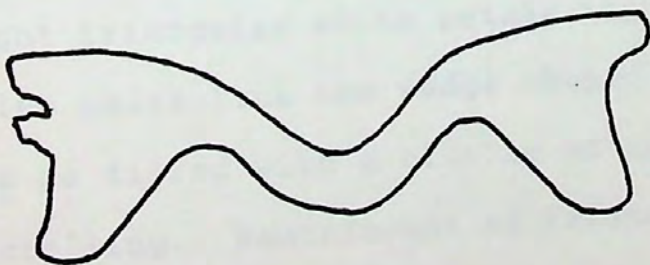
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غزال



Fragment #2

American University in Cairo/Pippin Collection No. 94

DESCRIPTION

The obvious similarities between this bowl fragment and Fragment #1 appear to indicate products originating from the same workshop. Both the ornamentation and the "Ghazal" signature suggest different artists interpreting the decorative vocabulary and techniques of this particular workshop in their individual styles.^{1 and 2}

The granular clay body has fired to an off-white color. Potting of this fragment is more consistently uniform, and lacks the deep finger indentation characteristic of Fragment #1. Concern with the profile has led the potter to tool the foot ring slightly.

The ornamentation consists of a more stylized version of that found in Fragment #1. The central flower motif is comprised of eight triangular white petals tipped with blue. Eight dots of blue paint link the wedge shaped petals. The surrounding area is filled with a cluster of circular units with interior scrolling. Reminiscent of Fragment #1, these angular lines have been incised through the dark slip background to reveal the clay body beneath, creating a relief effect.

COMPARATIVE MATERIAL

1. A. Abel, Gaibi et les grands faienciers egyptiens d'epoque mamlouke (Cairo, 1930), pl. 4, figs. 15 (incised scrolling) and 16. Scrolling which has been incised into the clay body surrounds a central floral motif.
2. A. Bahgat and F. Massoul, La ceramique musulmane de l'Egypte (Cairo, 1930), pl. 41 fig. 1^{bis} ('Ghazal' signature) and pl. L fig. 90. Incised scrolling with a similar floral motif is depicted.

Additionally, see Musee de l'art arabe du Caire, La ceramique Egyptienne de l'epoque musulmane (Frobenius S. A. Bale, 1922), pl. 128. 'Ghazal' and other common signatures depicted.



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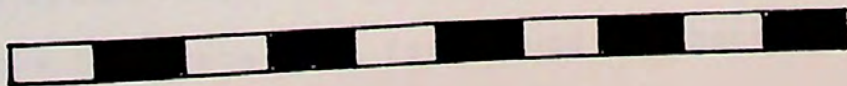
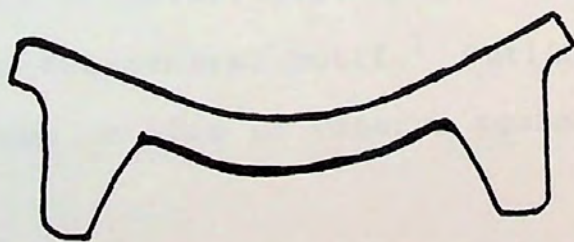
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Fragment #3

American University in Cairo/Pippin Collection No. 95

DESCRIPTION

The fragment is the underglazed portion of the base of a small bowl form. The uniformly thin walls, the slight flare of the foot, along with its subtle tooling, and the addition of a clay coil to ease the angle between the base and foot, are all indications of the skill of the potter.

The decorative field has been divided into four zones by cobalt blue bands interspersed with pale green teardrop shapes.¹ A cusped central medallion outlined in black contains what appear to be leaf forms in reserve against a hatched background.² Random drops of pale green are visible against the white background of the medallion. Six-petaled flower motifs with accompanying stems and leaves fill the interiors of four circular, scalloped medallions spaced regularly around the central motif.³ Outlined in manganese black, the foliage is also in reserve against a hatched background.

The playful manipulation of line, where a medallion border suddenly 'grows' into a leaf, illustrates the painter's creativity. Additionally, the varying widths of lines serve to create both foreground and background on the flat surface of a vessel.

A clear glaze covers both the interior and exterior of this fragment. Slight pooling on the interior has caused the cobalt blue to bleed into the central medallion. The uneven edge of glaze near the foot indicates the method of glazing was to pour, rather than dip or paint. A freely drawn chain motif in black, bordered with horizontal black lines, is exterior ornamentation near the foot.⁴

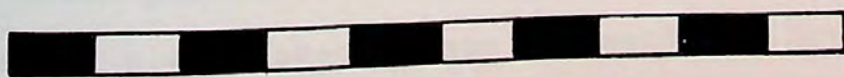
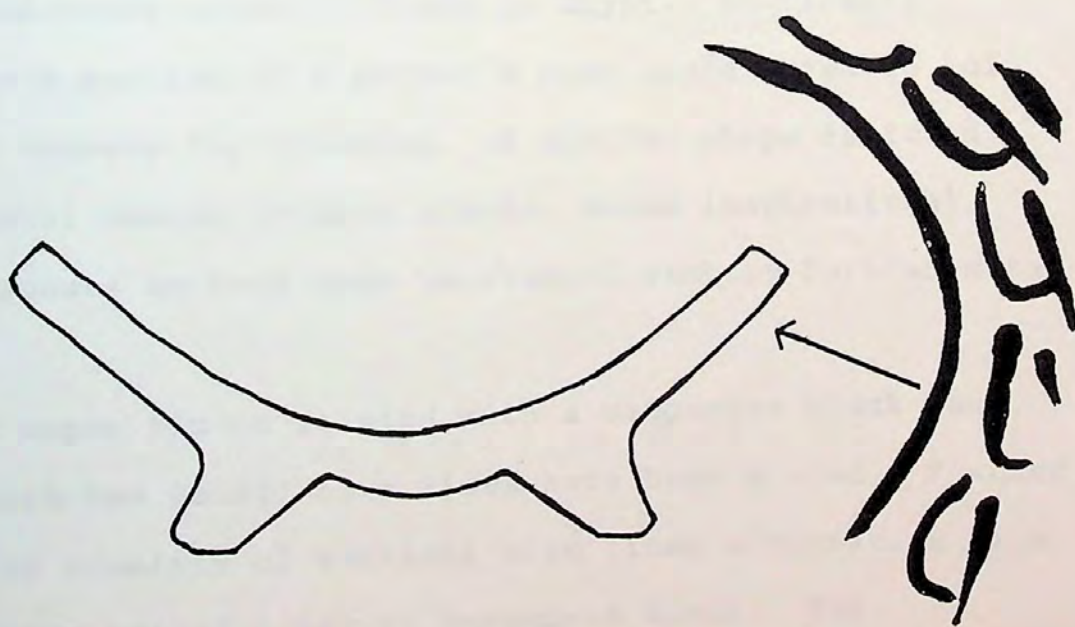
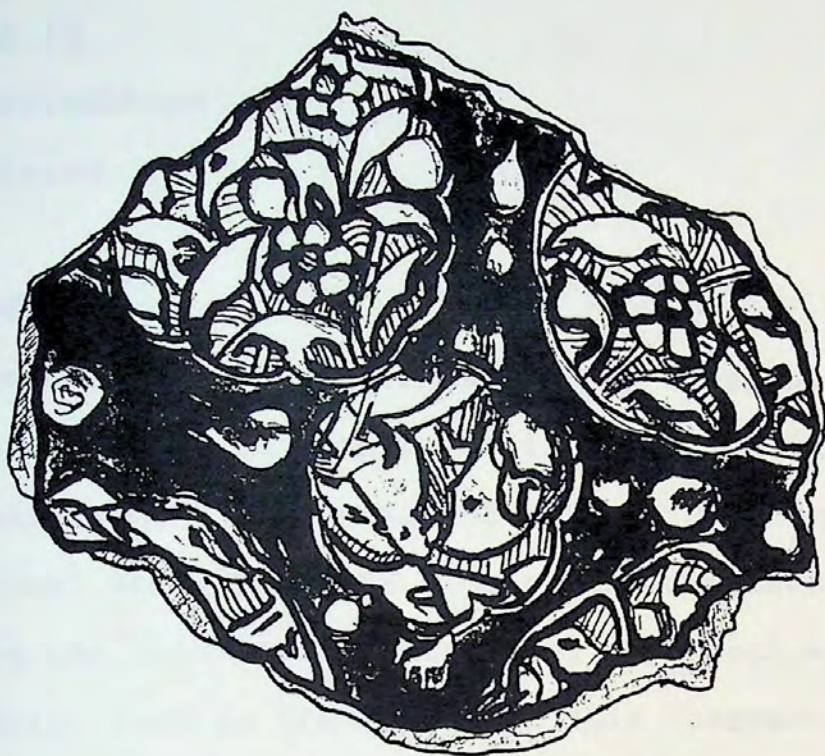
COMPARATIVE MATERIAL

1. G. Fehervari, Islamic Pottery A Comprehensive Study based on the Barlow Collection (London, 1973), no. 161a. The interior bowl cavity is divided into four zones, which are then rendered with foliage set in a hatched background.
2. A. Bahgat and F. Massoul, La ceramique musulmane de l'Egypte (Cairo, 1930), pl. 7 (background with foliage in reserve against hatched black lines) and pl. 38 fig. 6 (foliage in reserve against hatched background).
3. The Dikran K. Kelekian Collection of Persian and Analogous Potteries (Paris, 1910), pl. 67. Scalloped ogival medallions contain foliage in reserve.
4. E. Atil, Renaissance of Islam: Art of the Mamluks (Washington D. C., 1981), no. 77. A similar chain link is painted near the vessel rim.



3





Fragment #4

Fustat Expedition

Unregistered

DESCRIPTION

The use of a red earthenware clay which was then slip painted or decorated with sgraffiato is associated with Egyptian ceramics of the Mamluk period.¹ However, the intentional use of a white slip on an earthenware clay to simulate the look of the artificial frit body was not common procedure. Such is the case with this fragment.

The shape is uncharacteristic of the imitation Sultanabad wares normally found in Egypt. It closely resembles a portion of a potter's clay chuck, used to hold inverted vessels for trimming. A similar shape is found with unusual Mamluk ceramic stands, whose inspirational source appears to have been thirteenth century Persian metal stands.²

The upper rim is painted with a manganese black band, under which two cobalt blue lines have been placed. Further decoration consists of vertical blue lines alternating with thinly drawn paired lines in manganese black. The transparent glaze covering has a greenish tinge and a

network of cracks. Sketchy, linear ornamentation in an alternating blue and black color scheme is found on other underglaze vessels during this period.³

COMPARATIVE MATERIAL

1. E. Grube, Islamic Pottery of the Eighth to the Fifteenth Century in the Keir Collection (London, 1976), pp. 282-92, nos. 225-41.
2. Ibid., p. 286, nos. 240 and 243. Additionally, see J. Carswell, "An Early Ming Porcelain Stand from Damascus", Oriental Art 12 (1966), pp. 1-7.
3. A. Bahgat and F. Massoul, La Ceramique musulmane de l'Egypte (Cairo, 1930), pls. 37 fig. 1^{bis} and 41 fig. 2^{bis}.

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Fragment #5

Fustat Expedition

Unregistered

DESCRIPTION

This sizeable fragment seems to be the remains of a flat bottomed vessel fashioned from the ubiquitous off-white granular clay body. Potting is fairly uniform, and an angle has been tooled at the base to visually lighten the vessel's profile. A flattened coil handle, now lost, was originally joined to the exterior near the base. A flat-bottomed shape with slightly flaring sides and having the same robust quality in potting and ornamentation is found on certain ceramic basins which imitated metalwork.¹ Egyptian ceramic chamber-pots, with their vertical sides, flattened bases, and attached side handles, would appear to have provided inspiration for this vessel's shape.²

The spontaneous brushwork is rendered in bold black lines and triangular shapes which frame cobalt blue spirals and comma forms.³ The thick, transparent glaze covering the ornamentation has a green tinge and iridescent quality. It has gathered in a thickened coil near the base. Traces of the black manganese lines painted directly onto the surface of the vessel are visible below the glaze.

COMPARATIVE MATERIAL

1. E. Atil, Ceramics from the World of Islam (Washington, D. C., 1973), no. 65.
2. G. Scanlon, "Egypt and China: Trade and Imitation", Islam and the Trade of Asia (1970), pl. 5a and b.
The 10th century tin-glazed imitation porcelain chamber-pot shows Chinese influence, while the lead glazed vessel was the more usual local model.
3. A. Bahgat and F. Massoul, La ceramique musulmane de l'Egypte (Cairo, 1930), pl. 37 fig. 1^{bis}. While the ornamentation on Fragment #5 is more robust, similar scrolling is depicted inside painted divisions.



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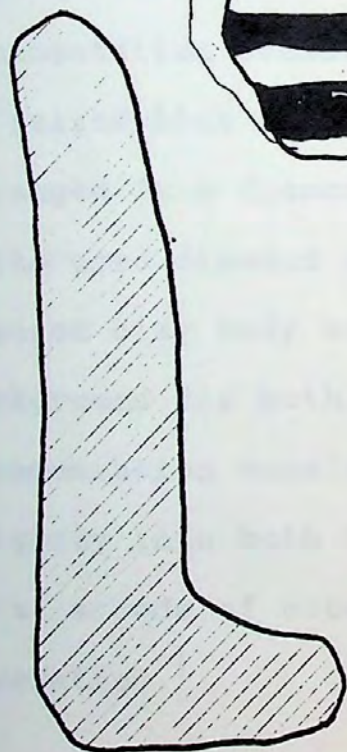


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Fragment #6

Fustat Expedition

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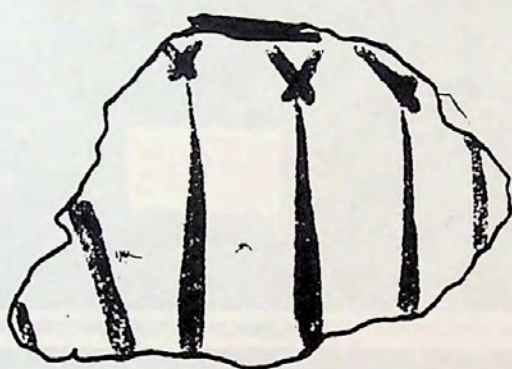
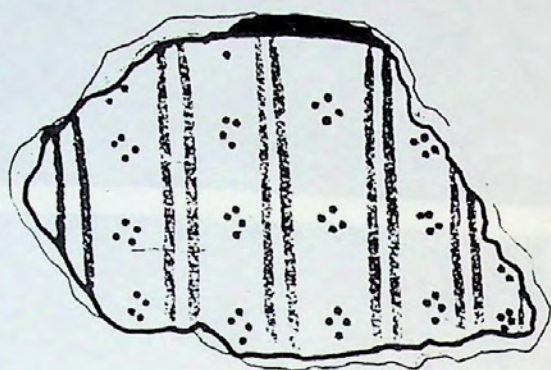
DESCRIPTION

This fragment is most certainly from the rim and upper portion of a small, hemispherical bowl. The granular, off-white clay body has been finely potted, evidenced by the uniformly thin wall of the shard.¹

The simple, but delicately drawn decoration has been carried out in cobalt blue and manganese black. Interior ornamentation consists of narrow radiating wedges composed of paired blue lines alternating with four black dots arranged in a diamond pattern. Syrian and Egyptian vessels alike used diamond shaped dotting for ornamentation.² The exposed clay body works effectively to provide a white background for both interior and exterior decoration. Rim ornamentation consists of a black band, which extends slightly into both the interior and exterior. A sketchy petal arcade of cobalt blue lines completes the exterior decoration.³

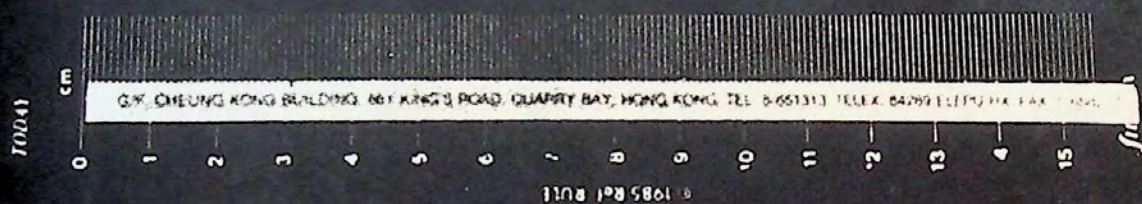
COMPARATIVE MATERIAL

1. E. Atil, Ceramics from the World of Islam (Washington, D. C., 1973), no. 72. The vessel must have originally appeared similar to this delicate, thinly potted, small hemispherical bowl.
2. A. Lane, Later Islamic Pottery (London, 1958), pl. 10 (Syrian vessel with dotting arranged diamond-wise in groups of four). For Egyptian examples, see Musée de l'art arabe du Caire, La céramique Egyptienne de l'époque musulmane (Frobenius S. A. Bale, 1922), pls. 102 and 103.
3. E. Atil, Renaissance of Islam: Art of the Mamluks (Washington, D. C., 1981), no. 74. Exterior ornamentation on this small, hemispherical bowl consists of simple vertical blue lines.





6



Fragment #7

Fustat Expedition

Unregistered

DESCRIPTION

This finely potted fragment of the rim of an open bowl or plate form is fashioned out of the granular, off-white clay body. Both the side wall and flaring, everted rim are of uniform thickness.¹

Near the rim, a row of cobalt blue vertical slashes with hooked terminations is bordered by horizontal black lines. A foliage scroll silhouetted in black against the white clay background precedes the ornamentation of the interior cavity.² Larger plant forms, outlined in black, are set in reserve against the intense cobalt blue background.

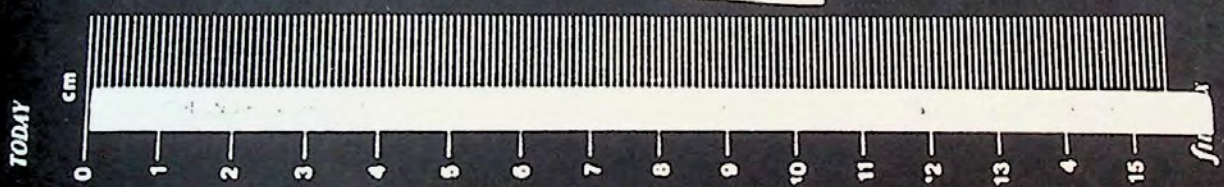
The exterior is decorated with an alternating pattern of larger vertical hooked forms in blue and black feathery tree motifs.³ It is bordered at the top with two black lines of varying thickness. The whiteness of the exposed clay body provides an effective background. The rim is painted with a solid black line. The fragment is covered with a transparent glaze on both the interior and exterior. This vessel could possibly have been overfired, due to the rough surface feel of the normally smooth glaze covering.

COMPARATIVE MATERIAL

1. E. Atil, The Renaissance of Islam: Art of the Mamluks (Washington, D. C., 1981), no. 73. Although the rim portion of this vessel has a more pronounced flange, the original shape of Fragment #7 must have approximated it.
2. A. Abel, Gaibi et les grands faienciers egyptiens d'epoque mamlouke (Cairo, 1930), pl. 3 fig. 13. A similar rim pattern is found on this example.
3. E. Atil, Ceramics from the World of Islam (Washington, D. C., 1973), no. 73. The same feathery tree motif is depicted within the pointed arcade on the exterior of the vessel.



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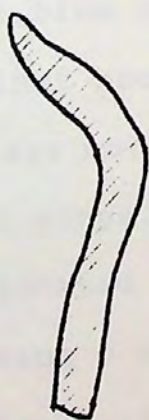
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Interior



Exterior



Fragment #8

Fustat Expedition

Unregistered

DESCRIPTION

This portion of a vessel wall was fashioned out of the off-white, granular Egyptian clay body. Ornamentation confined exclusively to the exterior suggests the original shape to have been that of a closed form, such as a large jar or albarello. The gradual tapering of this rather thickly potted, convex fragment would lend credence to this theory. Larger forms necessarily require thicker walls to support the vessel.¹

Cobalt blue and manganese black are painted directly onto the white body in a panel style reminiscent of textiles. Bands of vertical blue stripes alternate with ogival forms in reserve against backgrounds hatched with black lines.² Interior foliage motifs, with a single central dot, echo the ogival shape.³ Two freely drawn, horizontal black lines are located below this ornamentation.

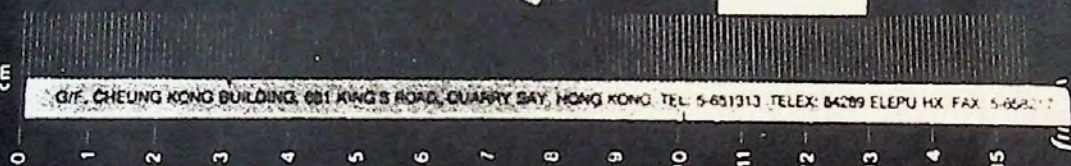
A transparent glaze having a slight iridescence covers both the exterior and interior surfaces of the fragment. Unevenness on the interior portion indicates the glaze was poured inside to ensure a water-tight vessel.

COMPARATIVE MATERIAL

1. A. Lane, Later Islamic Pottery (London, 1958), pl. 10.
The original vessel shape may have resembled this jar.
2. E. Atil, Renaissance of Islam: Art of the Mamluks
(Washington, D. C., 1981), no. 80. Vertical banding
from doubled black lines provides exterior
ornamentation on this large jar.
3. Musee de l'art arabe du Caire, La ceramique Egyptienne
de l'epoque musulmane (Frobenius S. A. Bale, 1922), pl.
100. A similar leaf form inscribed within an ogive is
in reserve against a hatched background.

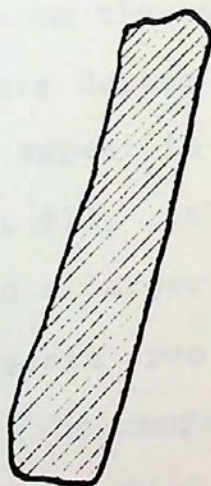
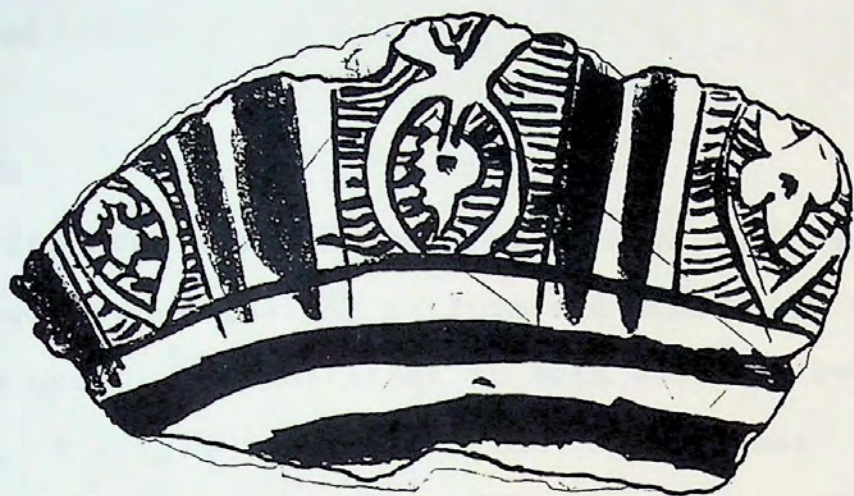
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Fragment #9

Fustat Expedition

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DESCRIPTION

This fragment from the base of a large bowl has a robust, spontaneous quality in form and ornamentation. Potting is uniformly consistent in both wall and foot thickness. A slight trimming of the foot rim has contributed to the profile. The sandy, off-white body originally contained a number of impurities. These have subsequently fallen out, leaving small, cave-like pockets of space. Spur marks remain on the bowl interior, a result of the stacking of the vessels during firing.

Ornamentation would appear to be a simplified version of that found on Fragment #12. It consists of a six-pointed star circumscribed within a larger circular medallion.¹ Remaining decoration suggests open petal forms radiating from the central motif.² The composition is painted in brushed lines of cobalt blue which are outlined in manganese black. The whiteness of the clay body provides tonal contrast. Slight pooling has occurred with the transparent glaze covering, which has a network of fine cracks and an iridescent quality.

COMPARATIVE MATERIAL

1. Musee de l'art arabe du Caire, La ceramique Egyptienne de l'epoque musulmane (Frobenius S. A. Bale, 1922), pl. 103. The same central medallion with pointed scallops is seen.
2. A. Abel, Gaibi et les grands faienciers egyptiens d'epoque mamlouke (Cairo, 1930), pl. 5 fig. 26. A similar central medallion, surrounded with a border of petal motifs, is the ornamentation on this example.

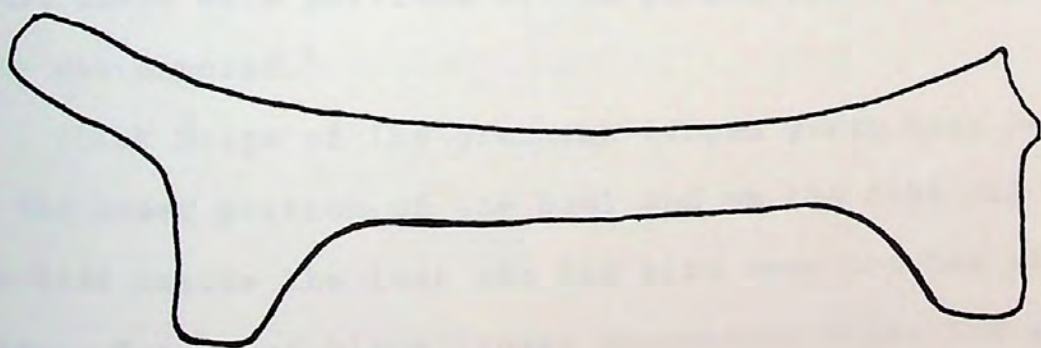
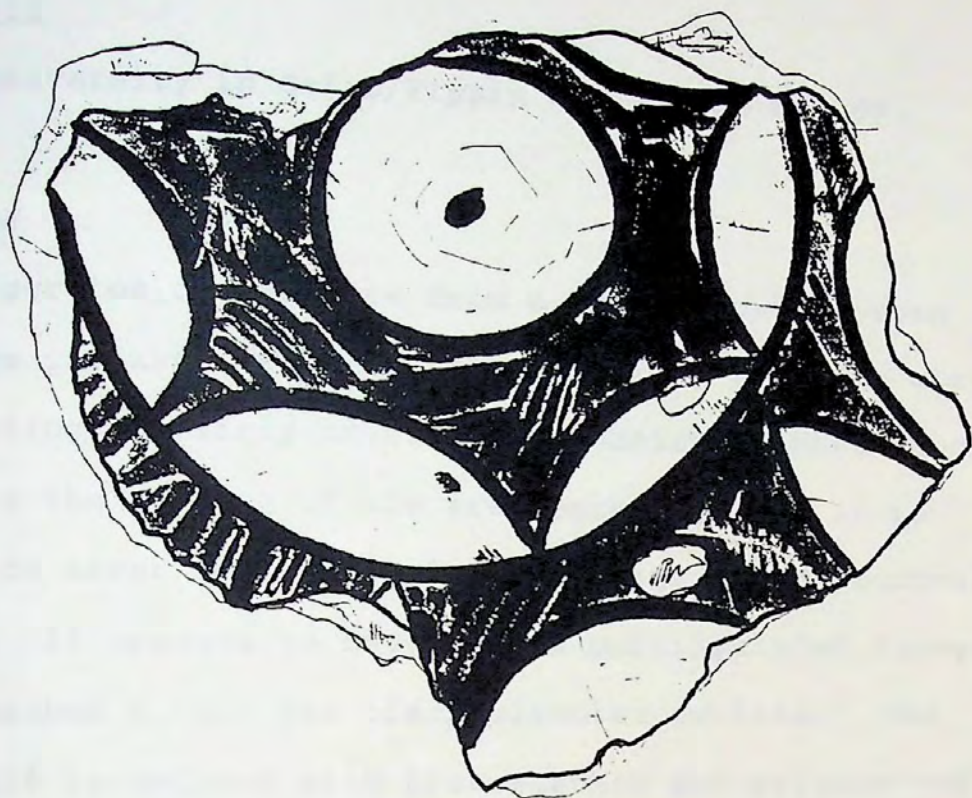
Also see E. Atil, Renaissance of Islam: The Art of the Mamluks (Washington, D. C., 1981), no. 69. The interior decoration has been based on a six-pointed star shape.



9



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Fragment #10

American University in Cairo/Pippin Collection No. 97

DESCRIPTION

This portion of the base from a larger bowl or open plate shape is fashioned from the off-white, granular clay body. Potting is fairly uniform and consistent throughout.

Due to the pooling of the transparent glaze, it is difficult to ascertain precisely the design of the central medallion. It appears to have been a multi-petaled flower motif inscribed within the black circular outline.¹ The floral motif is defined with blue strokes and silhouetted with triangular black wedges between the petals.² Because of the gradations within the cobalt blue of the flower, no doubt there were portions of the petals where the white clay body was exposed.³

Thick drips of the greenish-tinged glaze have collected on the lower portion of the bowl and on the foot itself. The area inside the foot rim has also been brushed with glaze. Traces of black linear decoration under the glaze are just visible on the upper portion of the exterior.

COMPARATIVE MATERIAL

1. E. Atil, Ceramics from the World of Islam (Washington, D. C., 1973), no. 71. Interior bowl decoration contains a central flower medallion.
2. A. Abel, Gaibi et les grands faienciers egyptiens d'epoque mamlouke (Cairo, 1930), pl. 4 fig. 18.
Although the interior of the medallion contains the inverted 'Y' motif, the petal shaped exterior appears similar to that shown on Fragment #10.
3. R. L. Hobson, A Guide to the Islamic Pottery of the Near East (British Museum, 1932), fig. 71. The original vessel shape and medallion ornamentation could have appeared similar to this thirteenth century bowl.

Additionally, the original medallion motif could possibly have been an entrelac. See Musee de l'art arabe du Caire, La ceramique Egyptienne de l'epoque musulmane (Frobenius S. A. Bale, 1922), pl. 105.



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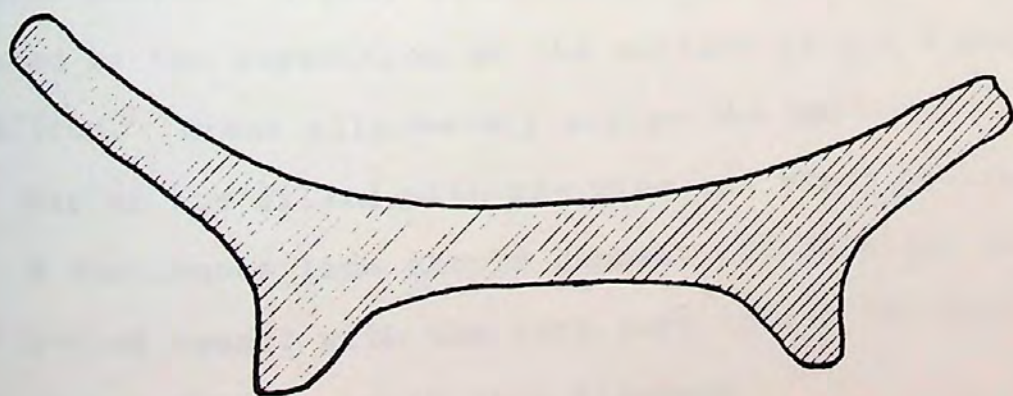
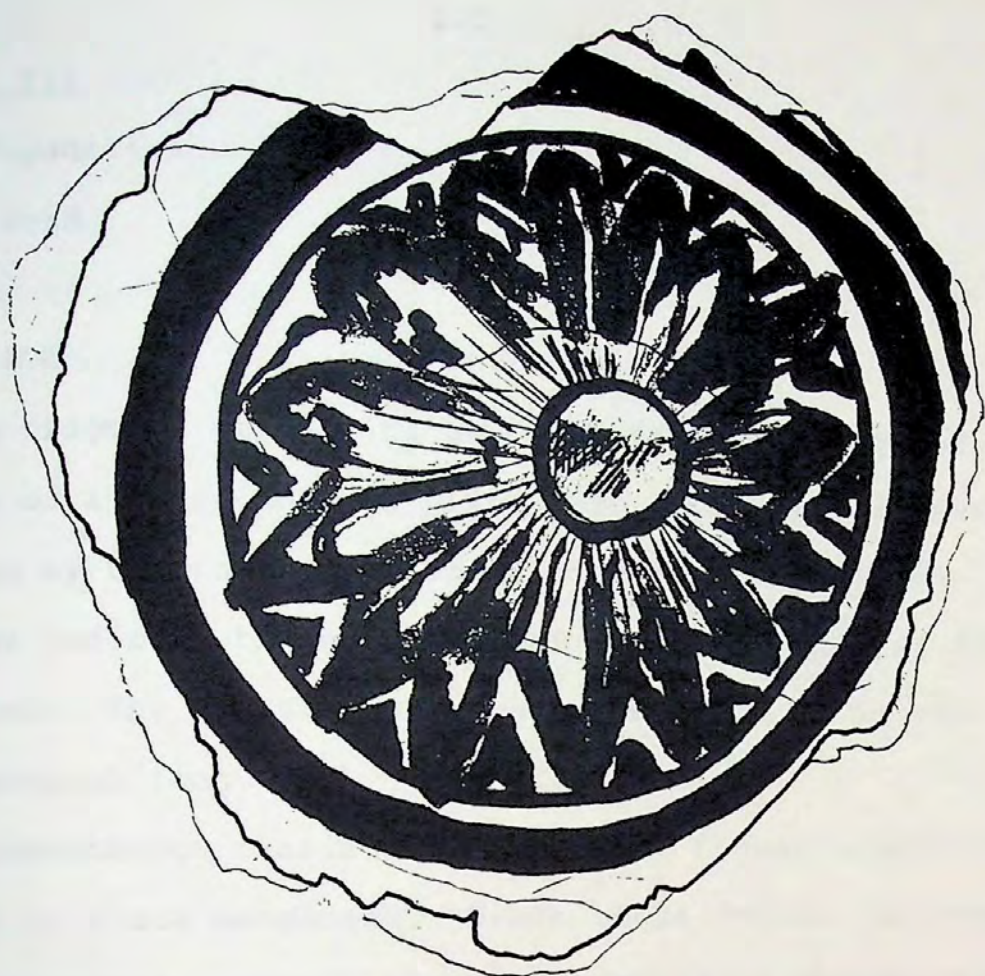
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Fragment #11

Fustat Expedition

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DESCRIPTION

The fragment appears to be the underglazed portion of the base of a large bowl or plate form. The wide diameter suggested by the portion of the foot rim and its added thickness indicate the necessity of increased support for the vessel. The granular clay body has fired to an off-white, grayish tone.

Ornamentation consists of a central flower medallion outlined in black manganese. Black loops define the core of the flower motif. Cobalt blue dots partially obscure the lighter sprinkling of black dots on the interiors of the pointed petals. A play of positive and negative areas is created by the repetition of the outline of the flower medallion.¹ Areas alternately expose the white surface of the clay or are filled with the blue and black dotting.

A continuous line should connect the exterior wall of a well-potted vessel with the base just inside the foot rim. This is not the case with this fragment.

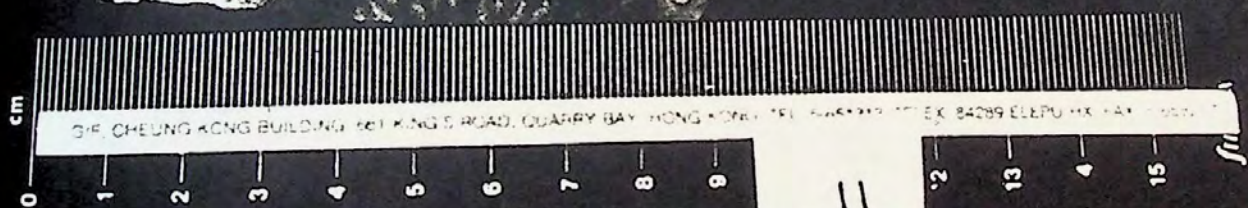
COMPARATIVE MATERIAL

1. V. Porter, Medieval Syrian Pottery (Ashmolean Museum Oxford, 1981), pl. 29. The interior design of this Syrian bowl consists of a flower form within a medallion. A positive/negative zig-zag pattern comprises the remaining ornamentation.

An example of Miletus ware where the robust pattern was based on a six-pointed star has certain parallels in ornamentation with this fragment. See N. Atasoy and J. Raby, Iznik: The Pottery of Ottoman Turkey (London, 1989), fig. 67.

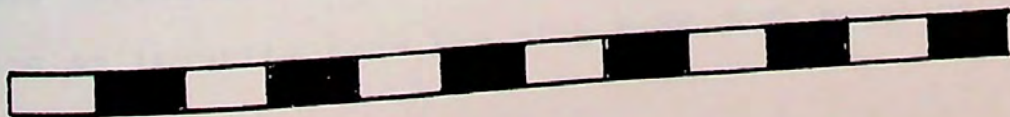
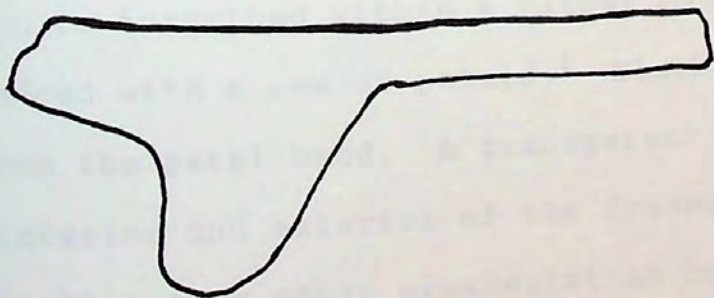
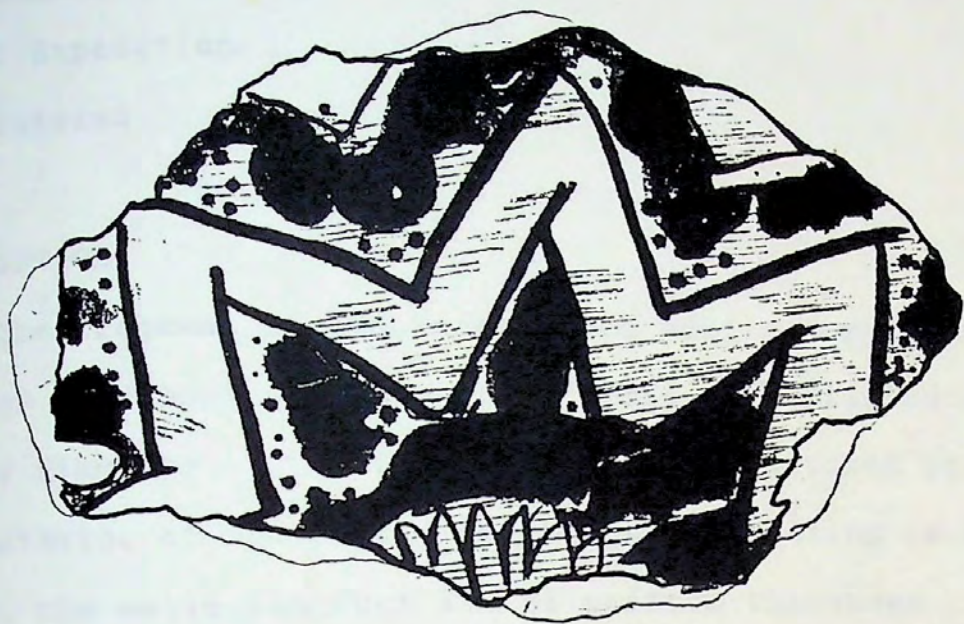
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Fragment #12

Fustat Expedition

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DESCRIPTION

The fragment is the underglazed portion of the base of a large open bowl or plate form. This is indicated by the larger diameter of the foot rim and the flattened profile of the interior of the shard. Although the potting is fairly heavy, the walls and foot are of uniform thickness. A stilt fragment adhering to the glaze appears to be fabricated from the same off-white, granular clay body as the vessel.

The linear decoration, rendered in cobalt blue and manganese black, was applied directly to the white surface of the vessel. Petal tips of a central flower motif are just visible, while pointed scallops echo its outline.¹ The composition is inscribed within a larger circular medallion, which is edged with a row of petals.² Black lines radiate outward from the petal band. A transparent glaze covers both the interior and exterior of the fragment.

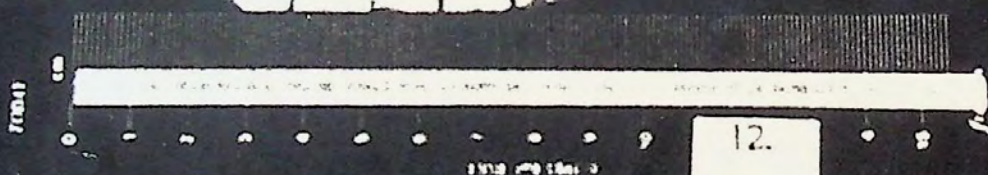
Cobalt blue from other ornamentation has bled into the two black lines painted on the exterior near the foot. The glaze has collected in a greenish-tinged coil, nearly obscuring an impurity from the clay body just breaking the surface.

COMPARATIVE MATERIAL

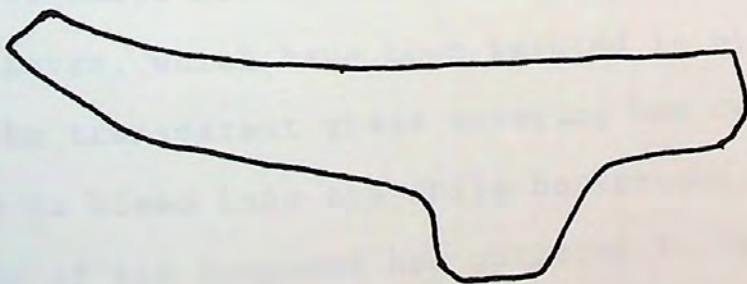
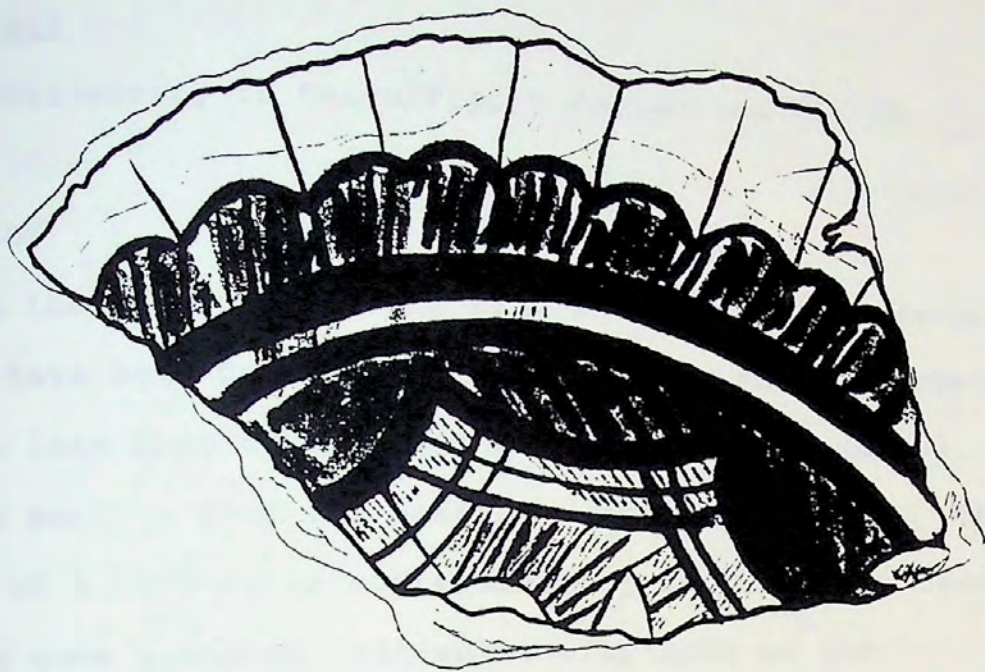
1. Musee de l'art arabe du Caire, La ceramique Egyptienne de l'epoque musulmane (Frobenius S. A. Bale, 1922), pl. 103. A central medallion edged with pointed scallops is depicted.

2. A. Abel, Gaibi et les grands faienciers egyptiens d'epoque mamlouke (Cairo, 1930), pl. 5 fig. 26.

Similar doubling of lines to describe the medallion is found here. The border of petals appears to be incised, although it was painted on Fragment #12.



12.



Fragment #13

American University in Cairo/Pippin Collection No. 85

DESCRIPTION

Both the foot rim and the side walls of this underglaze fragment have been ground down. Originally the foot must have been like that of Fragment #16. It is the central medallion portion from the base of a small bowl form. The remnants of a triangular stilt adhering to the glaze seem to be of the same granular, off-white clay body as the fragment. Potting is fairly consistent and uniform.

Within the circular medallion, outlined in black, a swan is rendered in an intense cobalt blue.¹ A silhouette effect is created with the solid blue bird form and graceful water plants set against the white background, with its sprinkling of small black dots.² Touches of blue ornament the plant leaves, which have been painted in black brush strokes. The transparent glaze covering has caused the cobalt blue to bleed into the white background. Glaze on the exterior of the fragment has gathered in large, greenish drips on the foot.

COMPARATIVE MATERIAL

1. A. Bahgat and R. Massoul, La ceramique musulmane de l'Egypte (Cairo, 1930), pl. 38 fig. 5. This fragment depicts a silhouetted bird within a roundel and background foliage.
2. Musee de l'art arabe du Caire, La ceramique egyptienne de l'epoque musulmane (Frobenius S. A. Bale, 1922), pl. 110. Good examples of silhouetted birds with foliage against dotted backgrounds are seen.

Additionally, see E. Atil, Ceramics from the World of Islam (Washington, D. C., 1973), no. 72. This small bowl illustrates the delicate quality attained when a single animal with foliage is isolated within a central medallion.

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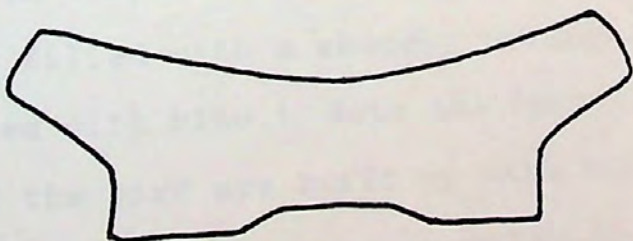


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Fragment #14

Fustat Expedition

Unregistered

DESCRIPTION

This small underglaze fragment is fabricated from the granular, off-white clay body. The tapering thickness of the wall, as well as the concentration of major decoration on the interior, indicates the fragment was probably originally part of the lower portion of a bowl form.

The indication of a linear border is visible on the upper portion of the fragment. The head of a bird has been painted in black outline onto the white surface of the vessel. An intense cobalt blue defines the wing, top of the head, and back of the bird. Although the use of various bird motifs was common on the Persian Sultanabad ware, this particular specimen illustrates the force of the local.¹ The background is filled with a sketchy foliage, occasionally dotted with blue.² Both the larger leaf forms and the figure of the bird are built up with slip into a relief.³ The clear glaze covering has caused no visible blurring of the pigments.

The exterior has been lightly sketched with alternating stripes of blue and a black feather motif. Horizontal bands of black with varying thickness are brushed below.

COMPARATIVE MATERIAL

1. Musee de l'art arabe du Caire, La ceramique egyptienne de l'epoque musulmane (Frobenius S. A. Bale, 1922), pl. 106. This large aquatic bird has the same circular, staring eye and is surrounded with similar leafy forms. Also see pls. 109-11 for the variety of birds painted by the Egyptian potters.
2. G. A. Fyodorov-Davydov, The Culture of the Golden Horde Cities (Oxford, 1984), illus. 12 fig. 4. Similar spotted foliage set in a dotted background is found.
3. E. Atil, Ceramics from the World of Islam (Washington, D. C., 1973), no. 70. The use of slip to create a surface with relief is illustrated by this bowl.



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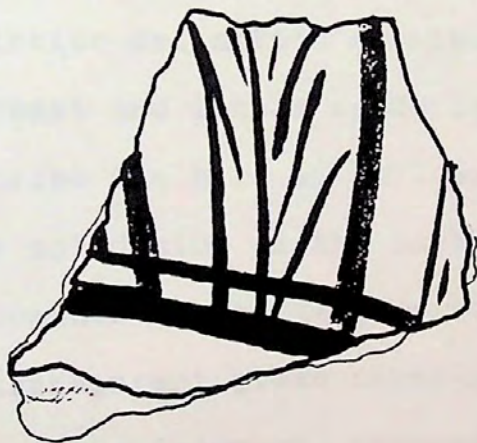
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Fragment #15

American University in Cairo/Pippin Collection No. 78

DESCRIPTION

This underglaze fragment is the central medallion from a large bowl or plate. Walls are thin and consistently potted from the off-white, granular clay. The overall skill of the potter is apparent from this fine example.

The use of the bird motif was common on underglaze wares from both Syria and Serai Berke.¹ In this fragment, an aquatic bird in reserve against a cobalt blue background fills the circular space. Interior definition consists of a row of black dots along its breast and linear rendering of the wing. Black outlines describe the bird as well as the foliage in reserve against the solid blue of the background. The white clay body figures prominently in the composition, lending tonal contrast. The transparent glaze covering has pooled in the central portion of the fragment, causing a slight blurring of the blue into the white in a few places.

The suavity of the foot is reminiscent of the Fatimid ring foot.² It has been completely glazed on the exterior with the transparent glaze covering. Carrying a greenish tinge, it has even run onto the bottom of the foot rim on occasion.

COMPARATIVE MATERIAL

- 1 A. Lane, Later Islamic Pottery (London, 1958), pls. 5A and 11. See also G. A. Fyodorov-Davydov, The Culture of the Golden Horde Cities (Oxford, 1984), illus. 9 fig. 1.
2. G. Scanlon, "Egypt and China: Trade and Imitation", Islam and the Trade of Asia (1970), pp. 81-96, fig.1.

For Egyptian examples of the bird motif, see A. Bahgat and F. Massoul, La ceramique musulmane de l'Egypte (Cairo, 1930), pl. 38 fig. 2 and Musee de l'art arabe du Caire, La ceramique egyptienne de l'epoque musulmane (Frobenius S. A. Bale, 1922), pls. 106 and 109-11.

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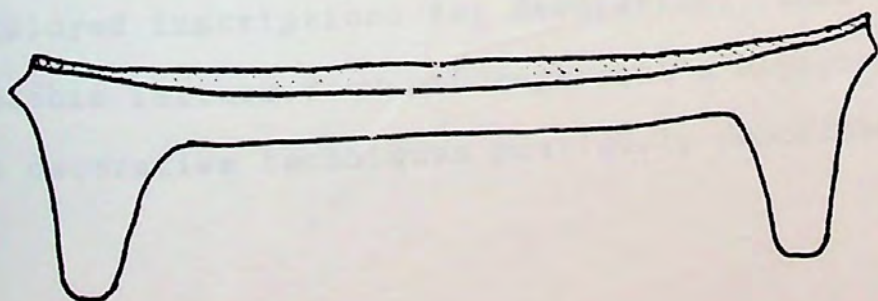
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15



Fragment #16

American University in Cairo/Pippin Collection No. 92

DESCRIPTION

This fragment from the base of a small bowl was fashioned out of the off-white, granular clay body. Uniform wall thickness and a slightly trimmed foot rim are characteristic features. The transparent glaze has pooled in the central portion of the fragment, and cracks in the pattern of concentric circles have developed.

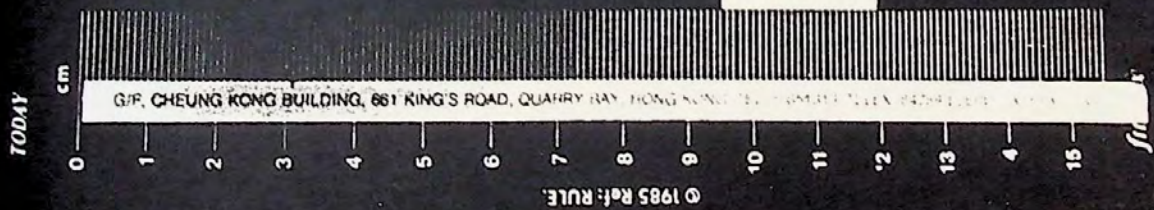
Solid cobalt blue silhouettes the central medallion, which is outlined in manganese black. Random streaks of blue have bled into the white background. A playful scattering of black Arabic letters set against a dotted background ornaments the interior of the medallion.¹ No actual word or phrases are depicted--the effect is purely decorative. Egyptian imitations of Persian Sultanabad ware often employed inscriptions for decoration. This ornamental use of Arabic letters does not represent a departure from Egyptian decorative techniques previously described herein.

COMPARATIVE MATERIAL

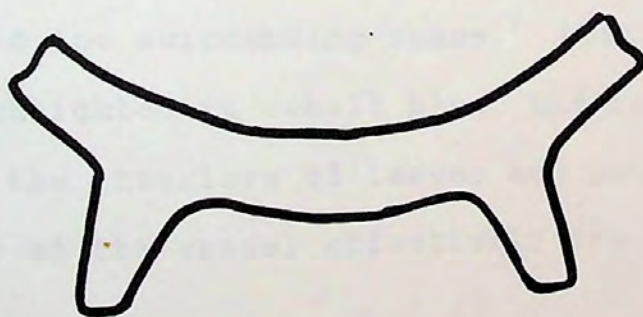
1. A. Abel, Gaibi et les grands faienciers egyptiens d'epoque mamlouke (Cairo, 1930), pl. 5 fig. 24. This illustrates the use of single Arabic letters for ornamentation. Additionally, see E. Atil, Renaissance of Islam: Art of the Mamluks (Washington, D. C., 1981), no. 81. A decorative inscription consisting of alifs and lams are painted around the neck and set against a dotted background.



16



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Fragment #17

American University in Cairo/Pippin Collection No. 90

DESCRIPTION

Heavy potting and the sizeable foot rim of this fragment indicate that the original vessel was quite large. The obvious focus of decoration on the interior suggests an outwardly flaring bowl or large plate. The off-white, grayish clay body has a sandy composition.

Ornamentation consists of portions of a goat, small feline creature, and a third unidentifiable animal, rendered in black outlines with blue dotted coats.¹ A circular movement is suggested by their arrangement, particularly in the bending of the calf to fit the space. A black outlined foliage with peony and lotus motifs set against a hatched background fills the surrounding space.² Portions of the flowers are highlighted in cobalt blue, and random singular dots punctuate the interiors of leaves and petals. The white clay body of the vessel effectively provides tonal contrast.

Both the interior and exterior have been covered with a transparent glaze.

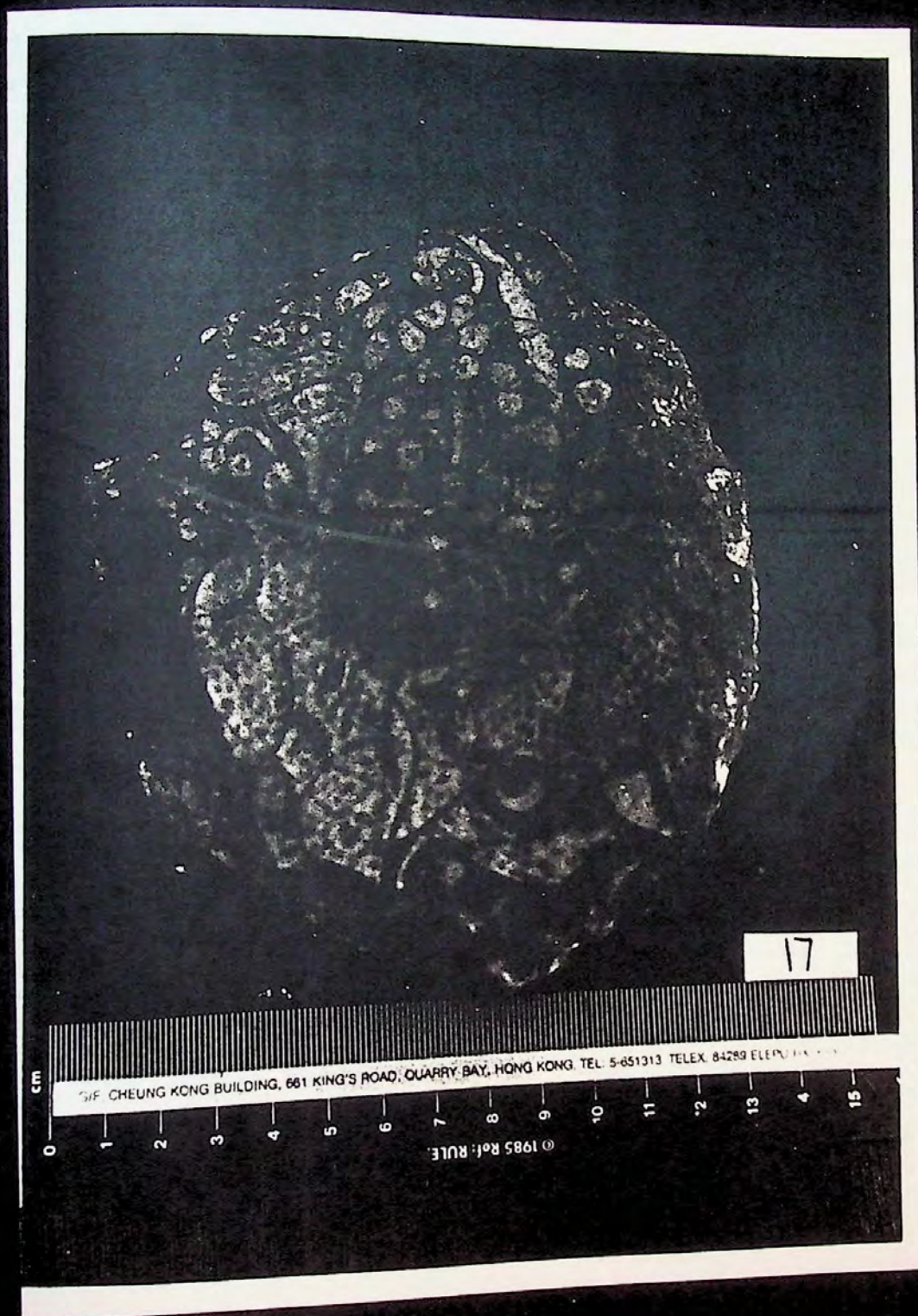
The lively, spontaneous quality of the ornamentation is a testament to the skill of the painter. A few, well-drawn

lines have adeptly captured the anatomy of the animals and imparted a humorous mood to the composition.

Drops of the greenish-tinged glaze have collected on the exterior of the foot rim. The angle between the foot and interior of the base has been smoothed with the addition of a clay coil. Black painted markings on the underside were likely used for vessel identification in the workshop.

COMPARATIVE MATERIAL

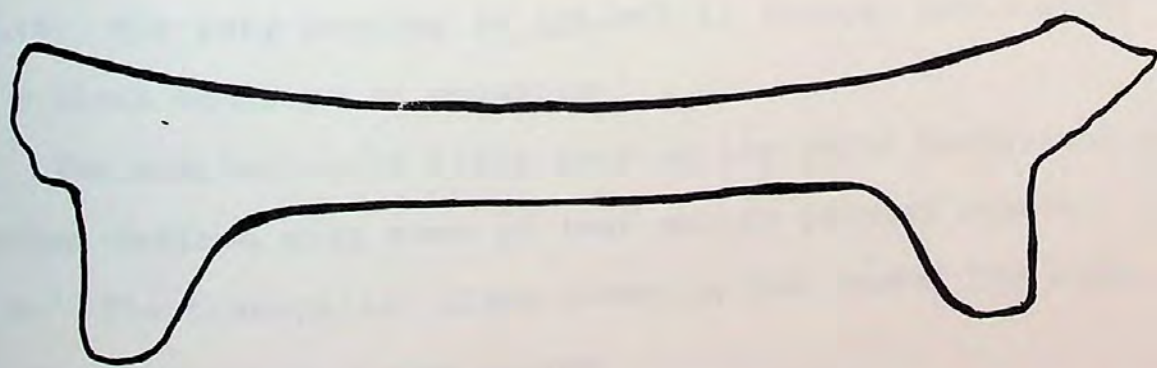
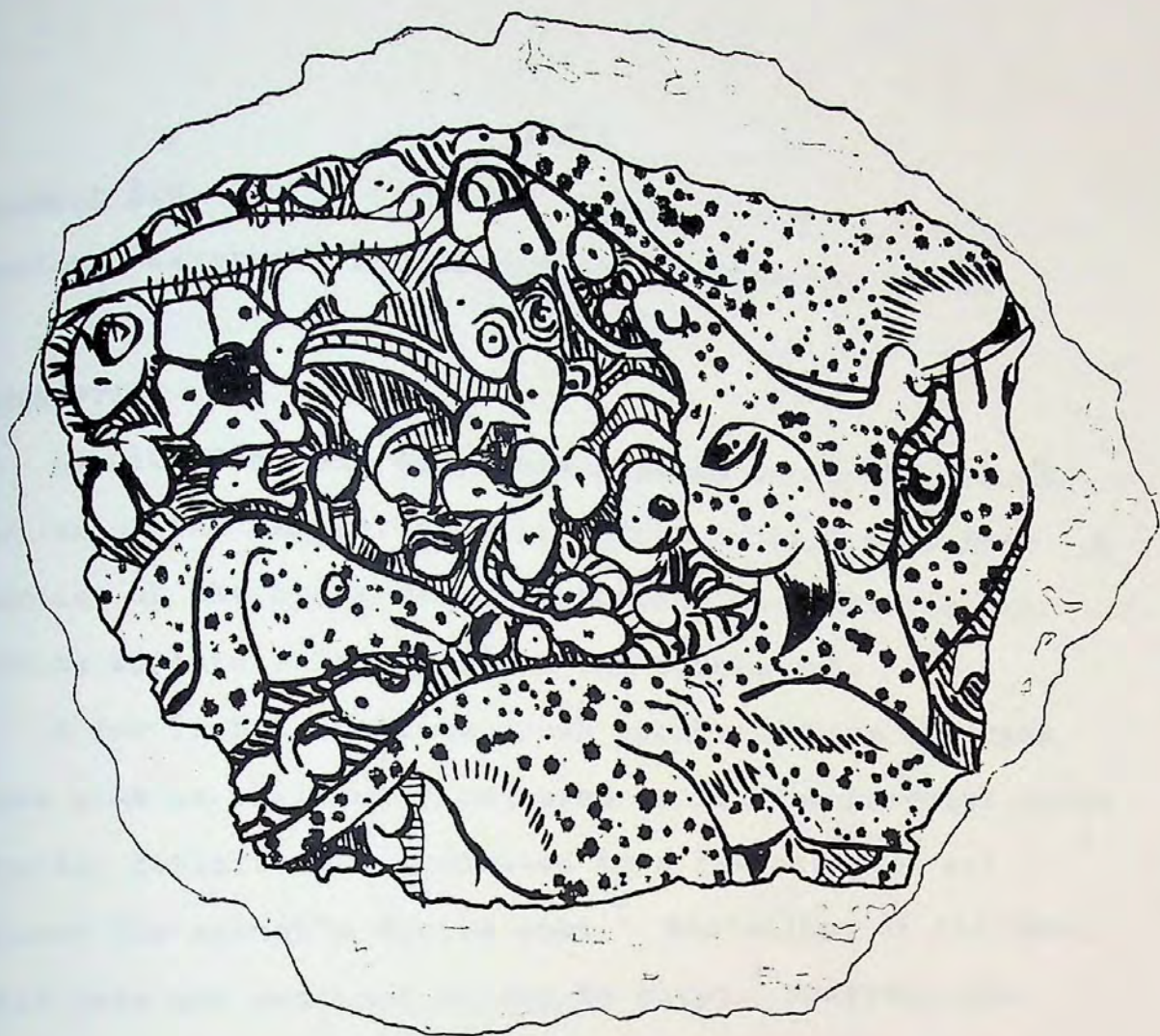
1. E. Grube, Islamic Pottery of the Eighth to the Fifteenth Century in the Keir Collection (London, 1976), no. 245. A dotted deer with similar interior linear definition is set within a foliage of peonies and lotus.
2. A. Lane, Later Islamic Pottery (London, 1958), pl. 12A. Lotus and peony foliage is set in reserve against a hatched background. Similar background treatment is also found in Musee de l'art arabe du Caire, La ceramique egyptienne de l'epoque musulmane (Frobenius S. A. Bale, 1922), pl. 111.



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Fragment #18

American University in Cairo/Pippin Collection No. 88

DESCRIPTION

As with Fragment #13, this appears to be the ground portion of the central medallion from a small bowl form. A fraction of the black circular outline is still visible. Potting appears fairly uniform and consistent.

A few lightly painted brush strokes define the hare, whose pose is skillfully adjusted to fit the circular space. Interior definition is confined to a few strokes, set against the animal's dotted coat.¹ Renderings of the hare motif were not confined solely to Egypt.² However, the Egyptian potter, demonstrating the force of the 'local', perhaps best explored the full range of this motif. The hare is portrayed in a variety of poses, singularly or in pairs. His very anatomy is subject to change, reminiscent of a sleek antelope on occasion.³

The scattering of black dots on the white background is further defined with rows of leaf motifs painted cobalt blue.⁴ The transparent glaze covering has caused the blue to run slightly in a few places.

The skill of the artist is reflected in long continuous lines defining the animal's anatomy. By faintly varying the

weight of the brush strokes, foreground and background are easily definable.

The potter's concern with the refinement of the form is reflected in two instances. A rolled coil was attached to the exterior to ease the transition between the foot and the base of the vessel. Additionally, the pressure from the potter's fingertips is visible on the base exterior, but not reflected on the interior. This would indicate that a pad of clay was pressed and smoothed into the indentation to create a more suitable surface on which to paint.

COMPARATIVE MATERIAL

1. A. Abel, Gaibi et les grands faienciers egyptiens d'epoque mamlouke (Cairo, 1930), pl. 17 fig. 88. A dotted hare, ears streaming back, is set in foliage.
2. The Dikran K. Kelekian Collection of Persian and Analogous Potteries (Paris, 1910), pl. 59. A dotted hare is inscribed within the circular central medallion.
E. Kuhnel, The Minor Arts of Islam (New York, 1971), fig. 88. A Syrian albarello has a crouching hare in large, leafy foliage as its principle ornamentation.
3. Musee de l'art arabe du Caire, La ceramique egyptienne de l'epoque musulmane (Frobenius S. A. Bale, 1922), pls. 117-19.

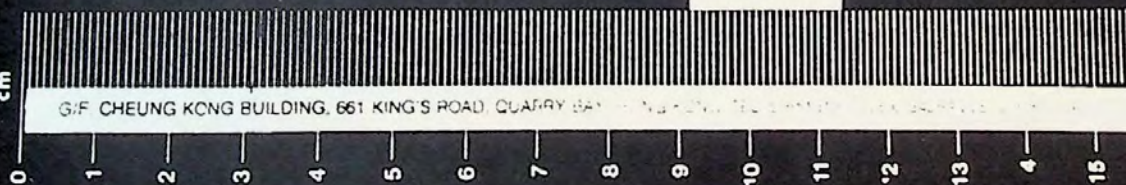
4. E. Grube, Islamic pottery of the Eighth to the Fifteenth Century in the Keir Collection (London, 1976), no. 247. A similar background with dotting and leaf foliage is seen.



18

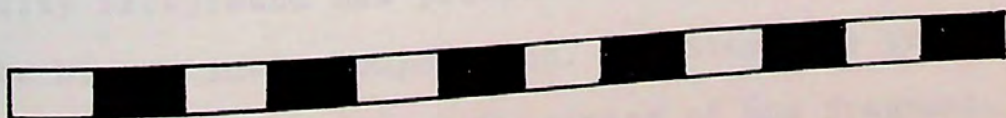
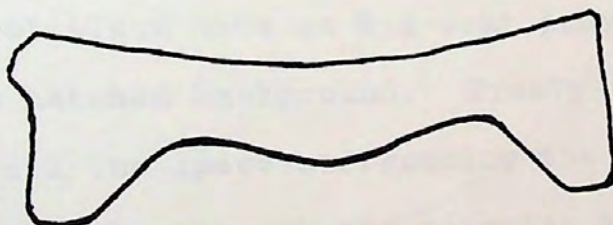
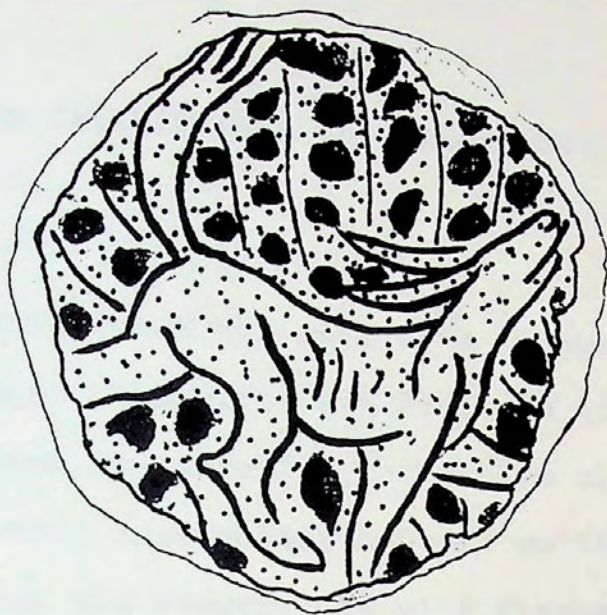
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Fragment #19

American University in Cairo/Pippin Collection No. 89

DESCRIPTION

This fragment constituted the base of a rather large open bowl or plate form. The walls and foot rim are fairly consistently potted from the granular, off-white clay body.

It is the delightful ornamentation found on this fragment which captures the viewer. As with Fragment #18, the principle motif is a local adaptation. Within the circular central medallion outlined in black, a crouching hare has been humorously depicted. The artist's skill is evident, as a single line adeptly expresses so much of the animal's anatomy. The wavy lines defining his chest and the light scattering of black dots on his coat provide effective contrast with the hatched background.¹ Freely drawn lotus and peony forms fill the space surrounding the hare. At one point the foliage breaks through the circular inner border reaching into the herringbone frame, a pattern which appears to be derived from Mamluk metalware.² Cobalt blue highlights punctuate the flower interiors. The exposed white clay background has provided effective tonal contrast with the black linear composition. Although the transparent glaze has pooled thickly in the center of the fragment, no blurring of pigments has occurred.

It appears that the area outside the medallion may have been organized into four zones, due to the placement of the four-lobed motifs. Stem and leaf forms are lightly brushed in black and set against a dotted background. Leaves are highlighted with cobalt blue drops.

The exterior has been simply decorated with horizontal black bands near the foot, from which vertical pale blue and black lines alternate. The transparent glaze covering has picked up some of the coloring oxides and therefore the large drips gathering on the exposed foot are a cloudy blue-green.

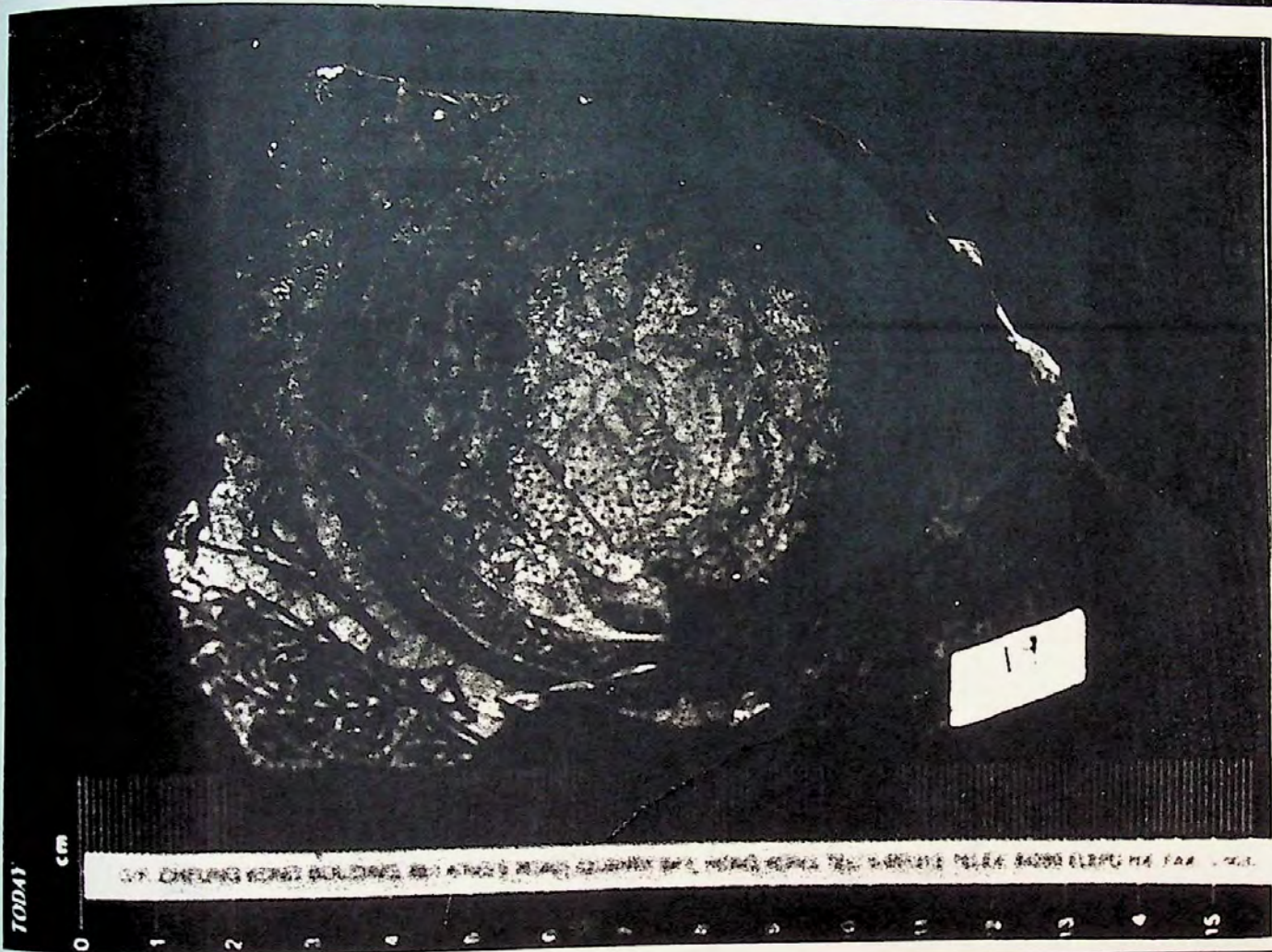
Colored oxides can be painted onto a vessel at various stages during the construction process. It seems likely that the artist chose to paint this fragment when the bowl was dry. The exposed black line on the exterior has a jagged edge, indicating the resistance offered when a wet pigment is applied to a dry surface.

COMPARATIVE MATERIAL

1. For examples of dotted hares in foliage, see A. Abel, Gaibi et les grands faienciers d'egyptiens d'epoque mamlouke (Cairo, 1930), pl. 17 fig. 88 and A. Bahgat and F. Massoul, La ceramique musulmane de l'Egypte (Cairo, 1930), pl. M fig. 96.

Various poses of this motif--confronted, curled in repose, bodies twisting and turning while leaping through foliage--portrayed in Musee de l'art arabe du Caire, La ceramique egyptienne de l'epoque musulmane (Frobenius S. A. Bale, 1922), pls. 117-19.

2. E. Atil, Renaissance of Islam: Art of the Mamluks (Washington, D. C., 1981), nos. 15, 16, 19, 30, and 34.

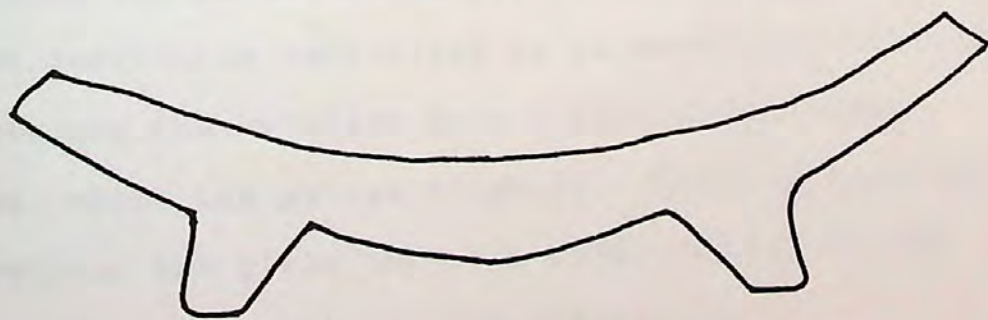


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Fragment #20

Fustat Expedition

Unregistered

DESCRIPTION

Side walls which gently flare vertically upward from a small foot constitute this underglaze fragment. The sandy, off-white clay body has been consistently potted, with a uniform thickness throughout.

As with Fragments #18 and #19, the subject is a hare. In this example, the profile of a large, crouching hare comprises the interior ornamentation.¹ Outlined with black manganese brush strokes, the animal is set in relief against a rich, blue background. Groupings of parallel lines describe interior anatomical definition. The boldness of the composition is echoed in the large, leafy plant forms surrounding the hare. These are also shown in relief, with interior decoration restricted to an occasional black dot.² Both interior and exterior have a transparent glaze covering, which has pooled slightly. There is a strong union between the glaze and clay body, and the glassy surface has an unusually smooth quality.

Exterior decoration consists of paired vertical lines in black. The uneven glaze line near the foot indicates that it was probably poured onto the vessel. Evidence of

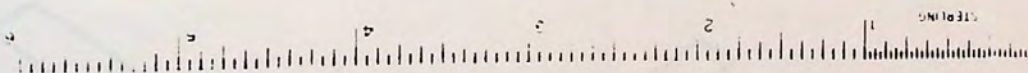
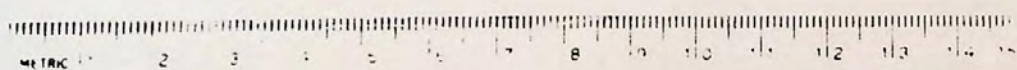
tooling on the foot rim suggests the potter's concern with the refinement of the form.

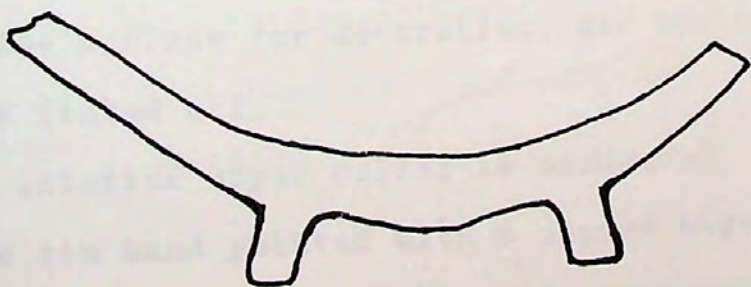
COMPARATIVE MATERIAL

1. E. Kuhnel, The Minor Arts of Islam (New York, 1971), fig. 88. A similar crouching pose, along with linear hatching to define the animal's anatomy, is seen on this Syrian albarello.
2. A. Bahgat and F. Massoul, La ceramique musulmane de l'Egypte (Cairo, 1930), pl. 41 fig. 4. Background dotted, fleshy foliage in reserve resembles that seen in Fragment #20.



20





Fragment #21

Fustat Expedition

Unregistered

DESCRIPTION

This fragment was part of the rim and upper portion of a bowl form. Metal bowls, with their rounded bases, inverted sides, and slightly everted rims, may have been the source of inspiration for the vessel's original shape.¹ Conversely, it may be regarded as a modified version of the shape so often associated with Sultanabad ware, where a vertical upper collar rises from tapering lower walls.² (See Fig. 11d herein) In place of the flange rim overhanging the exterior and interior of the vessel, a gently everted rim provides the termination. The finely levigated, red earthenware body was fashioned into a vessel with thin, uniform walls. Traces of the white slip, used to lighten the surface for decoration, are visible where the glaze has flaked off.

The interior upper collar is unadorned, save for the dark blue rim band painted with a jagged edge. On the ornamentation below, cobalt blue has been substituted for the usual black outlining. The twisting and turning of leaf foliage is depicted under a border of paired lines. Set in

relief against a blue-green background, the gentle blurring of the pigments adds dimension to the plant forms.

A circular medallion on the exterior wall below the everted rim is ornamented with vertical rows of an inverted 'Y' motif. The repeated forms are in relief against a deep blue background. Similar inverted 'Y' shapes were used in Mamluk Qurans as decorative background fillers, notably in the case of the illuminator Muhammad ibn Mubadir. (See fig. 51 herein) This motif was also used in metalware ornamentation.³ A hint of foliage outlined in blue is just visible against the blue-green background in the area encompassing the medallion. The lower portion is ornamented with leaf forms and bold linear decoration in relief against the blue-green background.

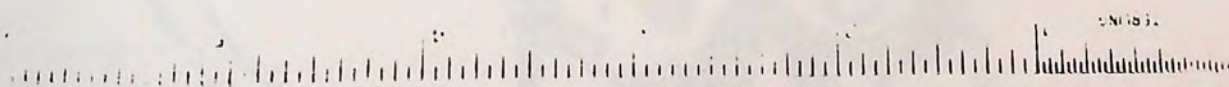
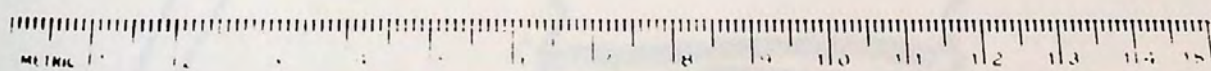
The use of red, earthenware clay with a white slip, the more prominent use of a blue-green color, and the elimination of the black outlines are features not typically associated with Egyptian Sultanabad wares. Nevertheless, a second example, Fragment #4, also utilized a white slip to simulate the appearance of the artificial frit body. Due to the profile of the fragment, the use of the inverted 'Y' motif, and the underglaze technique itself, the inclination is to include this fragment within the general classification discussed.

COMPARATIVE MATERIAL

1. E. Atil, Renaissance of Islam: Art of the Mamluks (Washington, D. C., 1981), no. 20.
2. For examples of this ceramic shape, see A. Lane, Later Islamic Pottery (London, 1958), pl. 4, E. Atil, Ceramics from the World of Islam (Washington, D. C., 1973), no. 70, and The Dikran K. Kelekian Collection of Persian and Analogous Potteries (Paris, 1910), pl. 72.
3. E. Atil, Renaissance of Islam: Art of the Mamluks (Washington, D. C., 1981), no. 39.
The use of the inverted 'Y' motif in ceramic decoration can be seen in A. Abel, Gaibi et les grands faienciers egyptiens d'epoque mamlouke (Cairo, 1930), pl. 1 fig. 1 and pl. 2 figs. 4-6.

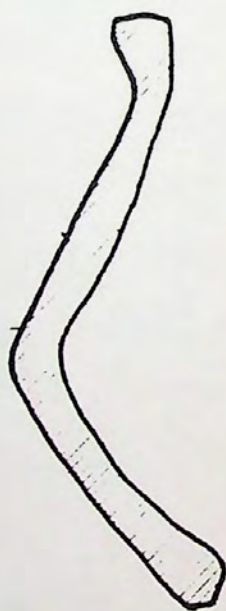


21





Exterior



Interior



Chapter Five

CONCLUSION

The twelfth century Persian ceramic revolution witnessed an artistic explosion of ideas and techniques. The rich and varied Seljuq wares were a product of the newly enunciated culture, with its innate "Persian-ness" coming through.

Persian artistic output was not extinguished by the Mongol invasions, but rather easier access to new foreign impulses resulted. The opening of easier, well-policed trade routes between the Far East and Persia facilitated the transportation of goods as well as ideas. The so-called 'Sultanabad' wares were the pottery of this new dispensation. That they were the market wares of the fourteenth century is indicated by their large distribution.

The Catalogue of Fragments, taken from the Pippin Collection and the study collection from the Fustat Expedition, illustrates the diverse skills of the Egyptian potter and artist. Foreign impulses combined with the local to produce a range of vessel shapes and ornamentation.

As this study has sought to point out, the major problem in dealing with the Sultanabad wares is one of provenance. A number of points have been used to illustrate the unfeasibility of simultaneous independent development

occurring in a number of small towns. Close interrelationships exist between the Sultanabad ceramics and other contemporary wares. Parallels in shape and ornamentation are found with vessels decorated in totally different techniques. Indeed, lustre, incised slip, ladjvardina, and underglaze wares were shown to have originated out of the same general stock. Watson has convincingly argued a Kashan origin for all lustre, including the Rayy style, which he maintained evolved into the Kashan style. The individual personal styles of the many artists working in a particular workshop must also be factored. Additionally, the location of pottery sites was not randomly selected. The ceramic center must be within close proximity to clay, fuel, and major trade routes, and for these reasons Kashan was ideally situated.

Characteristic of Islamic art has been its tremendous adaptability, absorbing local impulses while maintaining a distinct vocabulary of its own. Sultanabad ceramics were no exception to this rule. Chinese elements transported to Persia via the Mongol invasions combined with the evolving ceramic tradition to produce a separately distinctive ware. That this style was a product of the Kashan workshops and exported is extremely probable. If Lane's third type of Sultanabad ware is regarded as part of a transition, rather than a separate category, this appears all the more likely.

The use of motifs identified with Kashan and Sultanabad, rendered in the lustre technique, is characteristic of this third type. Additionally, the combined use of underglaze plus lustre on a single vessel toward the end of the thirteenth century is representative of an evolving ceramic tradition.

It is evident that twentieth century potters function in the same manner as did their predecessors. A major theme is established, involving shape, ornamentation, or a combination of the two. The development of this theme explores possible variations, new impulses, or a different rendering of the traditional. Major and minor sub-themes are pursued until the evolution is complete. Thus, the Sultanabad wares can be regarded as part of the natural evolutionary process.

BIBLIOGRAPHY

Abel, A., Gaibi et les grands faïenciers égyptiens d'époque mamlouke (Cairo, 1930)

Allan, J.W., "Abu'l-Qasim's Treatise on Ceramics", Iran 11 (1973), pp. 111-20.

Allan, J.W., "The History of so-called Egyptian Faience in Islamic Persia: Investigations into Abu'l-Qasim's Treatise", Archaeometry 15 (1973), pp. 165-73.

Allan, J.W., Medieval Middle Eastern Pottery (Oxford, 1971)

Allan, J. W., "Some Observations on the Origins of the Medieval Persian Faience Body", The Art of Iran and Anatolia from the Eleventh to the Thirteenth Century A.D. (London, 1975), pp. 60-4.

Aslanapa, O., Turkish Art and Architecture (London, 1971)

Atasoy, N., Iznik: The Pottery of Ottoman Turkey (London, 1989)

Atil, E., Ceramics from the World of Islam (Washington, D.C.: Smithsonian Institution, 1973)

Atil, E., "Two Il-hanid Candlesticks at the University of Michigan", Kunst des Orients 8 (1972), pp. 1-33.

Atil, E., Renaissance of Islam: Art of the Mamluks (Washington, D. C., 1981)

Ayers, J., "Some Wares of the Yuan Dynasty", Oriental Ceramic Society Transactions 29 (1954-5), pp. 69-86.

Baer, E., "Fish-pond Ornaments on Persian and Mamluk Metal Vessels", Bulletin of the School of Oriental and African Studies 31 (1968), pp. 15-27.

Baer, E., "Notes on the Formation of Iranian Imagery in the Thirteenth Century", The Art of Iran and Anatolia from the Eleventh to the Thirteenth Century A.D. (London, 1975), pp. 96-104.

Bahgat, A. and Massoul, F., La ceramique musulmane de l'Egypte (Cairo, 1930)

Bahrami, M., "A Master Potter of Kashan", Oriental Ceramic Society Transactions (1944-5), pp. 35-40.

Bahrami, M., "Further Dated Examples of Persian Ceramic Wares", Bulletin of the Iranian Institute 6 (1946), pp. 110-20.

Bahrami, M., Gurgan Faiences (Cairo, 1949)

Bahrami, M., "Some Examples of Il-Khanid Art", Bulletin of the American Institute for Iranian Art and Archaeology 5 (1939), pp. 257-60.

Boyle, J.(ed.), The Cambridge History of Iran 5 (Cambridge, 1968)

Caiger-Smith, A., Lustre Pottery (London, 1985)

Carswell, J., "An Early Ming Porcelain Stand from Damascus," Oriental Art 12 (1966), pp. 1-7.

Contenau, G., "L'Institut Francais d'archeologie et d'art musulman de Damas", Syria 5 (1924), p.105.

Cox, W. The Book of Pottery and Porcelain (New York, 1970)

Curtin, J., The Mongols (Boston, 1908)

Day, F., review of "The Ceramic Arts. A History" in A Survey of Persian Art, Ars Islamica 8 (1941), pp. 44-5.

Dimand, M. S., A Handbook of Muhammadan Art (New York, 1958)

Erdmann, K., "A Note on so-called Mina'i Faience", Bulletin of the American Institute for Persian Art and Archaeology 4 (1936), pp. 218-21.

Erdmann, K., "An Open Question in Islamic Ceramics", Bulletin of the American Institute for Persian Art and Archaeology 4 (1935), pp. 80-82.

Ettinghausen, R., "Comments on Later Iranian Ceramics", Artibus Asiae 35 (1973), pp. 165-9.

Ettinghausen, R., "Dated Persian Ceramics in some American Museums", Bulletin of the American Institute for Persian Art and Archaeology 4 (1936), pp. 145-51.

Ettinghausen, R., "Dated Persian Ceramics in some American Museums [Conclusion]", Bulletin of the American Institute for Persian Art and Archaeology 4 (1936), pp. 222-28.

Ettinghausen, R., "Evidence for the Identification of Kashan Pottery", Ars Islamica 3 (1936), pp. 44-70.

Ettinghausen, R., "IlKhanis: Ceramics", The Encyclopedia of Islam (London, 1971), pp. 1125-6.

Ettinghausen, R., "The Immanent Features of Persian Art", Connoisseur 157 (1966), pp. 207-12.

Ettinghausen, R., "Important Pieces of Persian Pottery in London Collections", Ars Islamica 2, (1968), pp. 45-65.

Ettinghausen, R., "New Affiliations for a Classical Persian Pottery Type", Islamic Art and Archaeology: Collected Papers (Berlin, 1984), pp. 1068-71.

Falk, T. (ed.), Treasures of Islam (New Jersey, 1985)

Ferrier, R. (ed.), Arts of Persia (New Haven and London, 1989)

Fehervari, G., Islamic Pottery: a Comprehensive Study based on the Barlow Collection (London, 1973)

Furnival, W., Leadless Decorative Tiles (Staffordshire, 1904)

Fyodorov-Davydav, G. A., The Culture of the Golden Horde Cities (Oxford, 1984)

Goddard, A., L'art de Iran (Paris, 1962)

Gompertz, G., Chinese Celadon Wares (London, 1958)

Garner, H., "Two Chinese Carved Lacquer Boxes of the Fifteenth Century in the Freer Gallery of Art", Ars Orientalis 9 (1973), pp. 41-50.

The Godman Collection, Persian Ceramic Art in the Collection of Mr. F. DuCane Godman, F.R.S. (London, 1891)

Gray, B., Persian Painting (London, 1977)

Gray, B., Studies in Chinese and Islamic Art (London, 1987)

Gray, B., Sung Porcelain and Stoneware (London, 1984)

Gray, B., "An Unknown Fragment of the 'Jami' Al-Tawarikh' in the Asiatic Society of Bengal", Ars Orientalis 1 (1954), pp. 65-75.

Gray, B., The World History of Rashid Al-Din (London, 1978)

Grube, E., Islamic Pottery of the Eighth to the Fifteenth Century in the Keir Collection (London, 1976)

Han, M., "Effects of Alpha and X-ray Doses and Annealing Temperatures upon Pottery Dating by Thermoluminescence", Applied Science Center for Archaeology 2 (1975)

The Arts of Islam, Catalogue of an Exhibition at the Hayward Gallery (London, 1976)

Hobson, R., A Guide to the Islamic Pottery of the Near East (British Museum, 1932)

Holt, P. (ed.), The Cambridge History of Islam 1 (Cambridge, 1970)

Howorth, H., History of the Mongols 3 (London, 1888)

Ipsiroglu, M., Painting and Culture of the Mongols (London, 1967)

James, D., Qurans of the Mamluks (London, 1988)

Jenkins, M., "Mamluk Underglaze-Painted Pottery: Foundations for Future Study", Mugarnas 2 (1984), pp. 95-112.

Kahle, P., "Chinese Porcelain in the Lands of Islam", Transactions of the Oriental Ceramic Society 1940-41 (1942), pp. 27-46.

The Dikran K. Kelekian Collection of Persian and Analogous Potteries (Paris, 1910)

Kuviak, W., "Overseas Pottery Trade of Medieval Alexandria as shown by Recent Archaeological Discoveries", Folia orientalia 10 (1969), pp. 20-30.

Kuhnel, E., The Minor Arts of Islam (New York, 1971)

Lane, A., "Archaeological Excavation at Kom-el-Dik: A Preliminary Report on the Medieval Pottery", Farouk I University, Faculty of Arts.

Lane, A., Early Islamic Pottery: Mesopotamia, Egypt and Persia (London, 1947)

Lane, A., Guide to the Collection of Tiles in the Victoria and Albert Museum (London, 1939 and 1960)

Lane, A., Later Islamic Pottery: Persia, Syria, Egypt, and Turkey (London, 1958)

Le Strange, G., Lands of the Eastern Caliphate: Mesopotamia, Persia, and Central Asia from the Moslem Conquest to the time of Timur (Cambridge, 1905)

Lovell, Hin-Cheung, "Sung and Yuan Monochrome Lacquers in the Freer Gallery", Ars Orientalis 9 (1973), pp. 121-30.

Matson, F., A review of "The Ceramic Art in Islamic Times. C. Techniques", Ars Islamica 8 (1941), pp. 59-63.

Medley, M., "Chinese Ceramics and Islamic Design", Percival David Foundation Colloquies on the Art and Archaeology of Asia 3 (London, 1972), p. 1 ff.

Medley, M., The Chinese Potter, A Practical History of Chinese Ceramics (New York, 1976)

Medley, M., "Islam, Chinese Porcelain and Ardabil", Iran 13 (1975), pp. 31-7.

Medley, M., Yuan Porcelain and Stoneware (London 1974)

Melikian, S., "The Sufi Strain in the Art of Kashan", Oriental Art 12 (1966), pp. 251-8.

Mikami, T., "The Relation between Persian Pottery and Chinese Ceramics in Medieval Iran", International Congress of Iranian Art and Archaeology 2 (1972), pp. 360-1.

Minorsky, V., "Sultanabad", The Encyclopedia of Islam 4 (1927), p. 547.

Morgan, D., The Mongols (Oxford, 1986)

Morley-Fletcher, H., Techniques of the World's Great Masters of Pottery and Ceramics (London, 1984)

Musee de l'art arabe du Caire, La Ceramique Egyptienne de l'epoque musulmane (Frobenius S. A. Bale, 1922)

Art Islamique dans les collections privees libanaises, Musee Nicolas Ibrahim Sursock, Exposition organisee du 31 Mai au 15 Juillet, 1974.

Oney, G., "Kubadabad Ceramics", The Art of Iran and Anatolia from the Eleventh to the Thirteenth Century A.D. (London, 1975), pp.68-84.

Philon, H., Early Islamic Ceramics: Benaki Museum Athens (London, 1980)

Pope, A., "A Note on Porcelain in Persia", Bulletin of the Iranian Institute 6, (1946), pp. 119-20.

Pope, A., "New Findings in Persian Ceramics of the Islamic Period", Bulletin of the American Institute for Iranian Art and Archaeology 5 (1937), pp. 149-68.

Pope, A., "Representations of Living Forms in Persian Mosques", Bulletin of the Iranian Institute 6 (1946), pp. 125-29

Pope, A., "A Note on Porcelain in Persia", Bulletin of the Iranian Institute 6 (1946), pp. 119-20.

Pope, A. and Ackerman, P.(eds.), Survey of Persian Art 4,9 and 11 (Sopa, Ashiya, 1981)

Porter, V., "Tell Minis Wares", Oxford Studies in Islamic Art 4, (1987), pp. 175-91.

Porter, V., Medieval Syrian Pottery (Ashmolean Museum, 1981)

de Rachewiltz, I., Papal Envoys to the Great Khans (London, 1971)

Rawson, J., Chinese Ornament: The Lotus and the Dragon (New York, 1984)

Reitlinger, G., "The Interim Period in Persian Pottery", Ars Islamica 5 (1938), pp. 155-78.

Reitlinger, G., "Sultanabad: Classification and Chronology", Oriental Ceramic Society Transactions, 20, (1944-5), pp. 25-34.

Riis, P. J., V. Poulsen, and E. Hammershaimb, Les verreries et poteries medievales: Hama, fouilles et recherches de la Fondation Carlsberg 1931-38 (Copenhagen, 1957)

Rice, D., Islamic Art (London, 1975)

Rice, D., "Some Wasters from Sultaniya", Burlington Magazine 60 (1932), pp. 252-3.

Riviere, H., La ceramique dans l'art musulman 1 and 2, (Paris, 1913)

Rhodes, D., Clay and Glazes for the Potter (Radnor, Pennsylvania, 1957)

Sarre, F., Die Kunst des alten Persien (Berlin, 1922)

Scanlon, G., "Egypt and China-Trade and Imitation", Islam and the Trade of Asia (1970), pp. 81-96.

Scanlon, G., "Fustat Expedition: Preliminary Report 1965", Journal of the American Research Center in Egypt 6 (1967), pp. 65-86.

Scanlon, G., "A Note on Fatimid-Seljuq Trade", Islamic Civilization (1973), pp. 265-74.

Scanlon, G., "Some Mamluk Ceramic Shapes from Fustat: 'Sgraff' and 'Slip'", Diamond Jubilee Volume of the Islamic Museum (1980), pp. 5-67.

Scarce, J., "The Gurgan Finds", Oriental Art N.S. 22 (1976), pp. 214-15.

Schultze-Frentzel, U. and Salge, H., "Glazes and Decorating Colors [sic] of Persian Islamic Ceramics Examined by X-radiography, and Transparent Seljuk Glazes examined by Electron-probe Microanalysis", Kunst des Orients 10 (1975), pp. 80-90.

Dei Gewerbe-Sammlung des Koniglichen 1, 2, 4, 7, and 10 Staatliche Museum (Berlin, 1913)

Soustiel, J., La Ceramique Islamique (Paris, 1985)

Spuler, B., History of the Mongols (London, 1972)

Stead, C., Fantastic Fauna, Decorative Animals in Moslem Ceramics (Cairo, 1935)

Tabbaa, Y., "Bronze Shapes in Iranian Ceramics of the Twelfth and Thirteenth Centuries", Mugarnas 4 (1987), pp. 98-113.

"Review of the Principal Acquisitions during the years 1916, 1926, 1935", Victoria and Albert Museum (London)

Watson, O., "Persian Lustre-Painted Pottery The Rayy and Kashan Styles", Transactions of the Oriental Ceramic Society 40 (1973-5), pp. 1-13 and pls.

Watson, O., "Persian Silhouette Ware and the Development of Underglaze Painting", Decorative Techniques and Styles in Asian Ceramics (London, 1979), pp. 86-103.

Whitman M., "The Scholar, the Drinker, and the Ceramic Pot-Painter", Content and Context of Visual Arts in the Islamic World (1988), pp. 255-60.

Watson, O., Persian Lustre Ware (London, 1985)

Williamson, A., "Regional Distribution of Mediaeval Persian Pottery in the Light of Recent Investigations", Syria and Iran: Three Studies in Medieval Ceramics (Oxford, 1987)

Yonemure, A., "The Art of Chinese Lacquer", Asian Art 1 (1988), pp. 31-49.

