SALJŪQ METALWORK
AND ITS SIGNIFICANCE IN IRANIAN ART

Thesis submitted for the Degree of
DOCTOR OF PHILOSOPHY
at the University of London

By
Sussan Bayani

School of Oriental and African Studies
November 1972
ABSTRACT

The thesis embraces the Saljuq period within which the artistic culture of Iran was studied in relation to the historical development, religious and social aspects, and in addition, consideration was given to ancient Iranian metalwork, and its roots in the past, especially of the Sasanian period. The scope of the subject covers the geographical, historical, technological, epigraphic and stylistic aspects of metalwork and has been treated in relation to other branches of Islamic decorative arts. Amongst the numerous examples of metalwork during this period, we have chosen some objects, most of which are unpublished, and attempted to establish their typology and whenever possible their chronology. We also tried to categorize the typical decorative elements that repeatedly appear on these metal objects.
In addition to the documentary material, several photographs of metal objects in public and private collections all over the world have been assembled. Some ornamental motifs, figural subjects and inscriptions decorating the objects have been singled out to be presented in line drawings for the purpose of comparative and iconographic studies.

When the origin and the date are not known, the objects have been either compared to a dated object or the style and iconography have been investigated in order to date them.

The thesis also contains a map. This is designed to illustrate the distribution of the metalwork centres.

The lists of the illustrations, which gives all the important information, including the places where the objects were acquired, is aimed to serve as corroborative evidence for the labelling of some objects.

Since archaeologists regard the British Museum
and the Victoria and Albert Museum as some of the world's main centres of research, most of its metal objects are already studied. Thus we have generalised our study to world-wide research. It is hoped that the thesis is just the beginning of a new series of research projects into world-wide collections, and these will present the collection's material as extensively as possible.

Such a short thesis could hardly provide enough space to present the full studies of all objects, but it is hoped that at a later date, a more extensive publication will include more data. Occasionally the candidate's opinion differs from those of some experts, but perhaps the evidence brought forward proves the candidate's theories.

The interest in all forms of Saljuq art has been growing for a long time but Saljuq metalware is a rather neglected subject. A greater knowledge about the shape, technique and style of the Iranian Saljuq metalwork enables us to differentiate between Saljuq pieces and later copies.
Technical information on this matter can be extremely valuable. In any case, such information must be collected and published in detail so that other investigators can make use of it.
CONTENTS

Abstract 2-5
Introduction and acknowledgements 7-10
Abbreviations 11
Notes on transliteration 12
Chapter I The historical background 13-41
Chapter II The roots and characteristics of Saljuq metalwork 42-72
Chapter III The importance of the role of religion in Saljuq art 73-84
Chapter IV The style, arrangement and characteristics of the decorative ornamentation of Saljuq metalwork 85-116
Chapter V The important role of calligraphy in Saljuq metalwork 117-139
Chapter VI The evaluation and development of Kufic and Naskhi inscription in Saljuq metalwork 140-147
Chapter VII Contents of inscriptions in Saljuq metalwork 148-180
Chapter VIII A detailed survey of some Iranian Saljuq metal products especially of Khurâsânian origin 181-242
Conclusion 243-245
List of Figures 246
Catalogue of studied objects 247-255
List of museums and private collections, the metalwork of which have been studied 256-257
Bibliography 258-266
INTRODUCTION AND ACKNOWLEDGEMENTS

The splendid art of the Saljūq period has its roots in the ancient past. To fully understand it one must look back to the art of earlier ages of Iranian history. In this way one can comprehend its originality, its evolution and the changes it underwent in the course of the centuries. The activities of the Iranian artists had been frustrated ever since the downfall of the Sāsānian dynasty. Now it was revived. The period has been aptly termed the Golden Age for throughout these years both artists and scholars flourished. This was due to the tranquility and wealth of the age and the patronage lavished on them. All of this gave to artists, artisans and poets alike the opportunity to experiment and to demonstrate their gifts of artistic creation.

Metalwork is the most comprehensive record of the artistic life of Iran during the reign of the
Saljuqs. There is no painting antecedent to the 12th century, save only a few fragments. But we have metalwork in a steadily expanding series, representing many styles and techniques and illustrating nearly every phase of the Iranian artistic consciousness. Thus if not the supreme manifestation of the Iranian aesthetic genius metalwork is at least the oldest and most ubiquitous. It is also perhaps the most characteristic; it gave direct and sensitive expression to artistic feeling. In its graceful shapes Iranian ideas of form found their most immediate and perfect embodiment. Scenes from literature, such as the Court and ordinary life, sober designs and fantastic inventions, are all represented.

In Saljuq art the most striking feature is that it is unique; its style is definite, its technique is distinct. Although it bore an obviously close relationship to ancient Iranian art, it developed its own, very individual characteristics.
The achievements of Saljūq metalwork survived for a few centuries. This claim has been sufficiently proved, since the arts of the following centuries have been shown to be in a definable kind of relationship to ideas, forms and techniques, created or developed during that period.

Yet, if these relationships between Saljūq art and later ones can be indeed established, it makes our studies on this particular field of art more difficult, since the attribution of undated objects to the period in question presents an almost unsurmountable difficulty. In fact actual literary documentation for Saljūq art is very limited and is tied up with the interpretation of a few surviving texts.

The period is not an easy one to define properly. First, there is lack of proper monographic studies, except in the case of other media of art, e.g. pottery and architecture; this makes generalisation and conclusions extremely difficult.
secondly, the periodisation of the artistic entities which can be defined, is hardly possible, except by the most general terms.

I would like to take this opportunity to express my deepest sense of gratitude to Dr. G. Fehervari under whose supervision this work has been written. Also my grateful thanks and appreciation are due to the staffs of the libraries of the School of Oriental and African Studies and the Warburg Institute. The writer is indebted to many museum officials and private and commercial collectors for opportunities to study pieces in their possession or charge.

Also I would like to thank Mr. A. Wise and Mrs. S. Holt. My deepest gratitude is due to my parents for their constant encouragement, without which this thesis would not have been completed.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.I.</td>
<td>Ars Islamica.</td>
</tr>
<tr>
<td>A.O.</td>
<td>Ars Orientalis.</td>
</tr>
<tr>
<td>B.A.I.P.A.A.</td>
<td>Bulletin of the American Institute for Persian Art and Archaeology.</td>
</tr>
<tr>
<td>B.M.</td>
<td>Burlington Magazine.</td>
</tr>
<tr>
<td>E.I.</td>
<td>Encyclopaedia of Islam.</td>
</tr>
<tr>
<td>G.B.A.</td>
<td>Gazette des Beaux-Arts.</td>
</tr>
<tr>
<td>J.A.</td>
<td>Journal Asiatic.</td>
</tr>
<tr>
<td>M.I.E.</td>
<td>Memoires de l'Institut d'Égypte.</td>
</tr>
<tr>
<td>O.L.</td>
<td>Orientalistische Literaturzeitung.</td>
</tr>
<tr>
<td>Survey.</td>
<td>The Survey of the Persian Art.</td>
</tr>
<tr>
<td>M.M.A.</td>
<td>Metropolitan Museum of Art.</td>
</tr>
</tbody>
</table>
The transliteration system followed in general in this study is a simplified version of that employed in the Encyclopaedia of Islam;

The names of countries and towns e.g. Iran, Iraq, Harat, Mosul, are given without diacritical marks, and in the case of architectural terms, the system of transliteration used in the Survey of Persian Art is followed. The common metalwork terms, such as Qalamdān, dawāt, Ḩanādān are not italicized and are only given diacritical marks.
CHAPTER I
THE HISTORICAL BACKGROUND OF THE SALJŪQ DYNASTY

The rise of the great Saljūq dynasty is one of the most significant events in medieval Islamic history. In order to understand fully and to appreciate the artistic achievements of the Saljūqs, it seems desirable to examine the historical, social, religious and cultural background of the period.

After the decline of the Sāsānian Empire, Iran was split up into many governments under petty rulers, each ready to attack the others, and this contributed to the general weakness, disunion and political chaos in the various provinces of the vanished Empire. A vigorous remedy was needed to revive the dying state and this was not achieved until the coming of the Saljūqs. The Saljūqs were able to build up a new supremacy. They devastated the country and overthrew the local kingdoms which existed there. Thus, once more, Iran was reunited from Transoxiana to the Mediterranean under one sovereign. Furthermore, the Saljūqs, who embraced Islam, opened up a new political relationship with the Baghdad Caliphate which finally contributed to a united Muslim Asia.
This brought both political integrity and stability to the country providing ground for social and economic progress. The Saljuq state was the organizing force that brought about conditions in which art flourished and the talents of men of scholarship thrived. In fact this period constitutes one of the peaks of the history of Iran.

The Saljuqs were originally a family of chiefs of the Qinig clan of the Oghuz or Ghuzz, a Turkish people whose home was in the steppes north of the Caspian and Aral Seas. The progenitor of the Saljuq dynasty was Duqay, called Temur-Yaligh (with the iron-bow). He and his son, Saljuq, served the chief of the Oghuz tribe, the Yabghu. As their power gradually increased the majority of the Ghuzz became associated with them and eventually the Yabghu became jealous. The hostility between these two branches of the Qinig forced Saljuq to flee from the Qirgiz steppes with his retainers and their flocks to Jand. There, in the last decade of the 10th century, the Saljuq family embraced Islam. Later the Saljuqs under the leadership of Bighu Arslan Isra'il, the son of Saljuq, and his two
brothers, Mūsā and Mīkāl as well as Mīkāl's two sons, Ṭūghrīl Beg Muhammad and Chaghrī Beg Da'ūd, moved from Jand to Bukhara. In their westward movement towards Iranian land, they took the same route as other barbarian people had in the past, i.e., they crossed Syr Darya and Oxus basins, which are transitional zones between Central Asia and the Iranian Plateau.

First, they settled peacefully on the north-eastern frontiers of Iran as pastoral nomads on the agricultural lands there which they found highly suitable pasture for their flocks. Later on the pressure of population and the need for more pasture compelled them to advance forward in order to let their pastoralist economy survive.

The Saljuqs based their rise to power on the disorder in Iran at that time rather than on their own strength. They were encouraged by the weakness of the native Iranian dynasties, the Šamānids and the Buḫīds in the west, and by the fact that the Ghaznavids in the East concentrated on disturbances in India rather than the danger of the Turkish tribes on their Northern frontiers in Khūrajān. Finding an
opening, the Saljuqs entered Iran in large numbers early in the eleventh century.

The Saljuqs found the political conditions in Transoxiana favourable to the furtherance of their own interests and the development of their power, since there was continuous warfare for supremacy between the Samanids, the Ghaznavids and the Turkish Qara Khânids. The Saljuqs became involved in this struggle as auxiliary troops in the service of various warring tribes there. They fought for anyone who would assure them pasture for their herds.

Later in 426/1035 the Saljuqs requested permission from Mahmud of Ghazna to settle on the northern fringe of Khurasan near Sarakhgh, Abîvard and Farâva. Sultan Mahmûd allotted them these territories. He did so in an attempt to enrol the Saljuqs as frontier guards against further turkmen ("turkmen" as the Islamic historians called the Ghûzz in Iran from the 5th/11th century) raids and also to use them as auxiliary troops against his enemies the Turkish Qara Khanids.
But this arrangement did not lead to the desired result. It was soon obvious that the Saljuqs being nomads were unfamiliar with the concepts of defined frontiers and the sanctity of land and property. They became a serious danger to the adjoining Iranian provinces from their predatory habits and continual raids, the more so as they were numerous. The Khurasan towns were imperiled by Saljuq attacks. Economics and commercial life were at a standstill, law and order broken down, and most of the pasture in Khurasan made barren by the Turks' flocks. Mahmud kept Bighu Arslan Israil, leader of the Saljuqs, prisoner in the fortress of Kalanjar in Multan as a hostage for the good behaviour of his people. Later he died in prison. But his imprisonment was to no avail, and these measures did not succeed in furthering the Ghaznavids' aims; it only furthered his nephews, Tughril Beg and Chighri Beg, with a ready pretext to cross Khurasan in arms against the Ghaznavids.

Meanwhile, Ghaznavid authority was declining even
more in the Western regions. From 426/1035 on the
Ghaznavids were almost continually fighting against
the Saljuqs. Eventually, in 431/1040, the Ghaznavids' army led personally by Sultan Masud, the son and successor of Mahmud, was totally defeated by the Saljuqs at the battle of Dandangan, between Sarakhs and Marv. Masud's forces were utterly routed and driven back to Ghazna. The commanders had so lost their confidence in him that they set up his brother, Muhammad b. Mahmud, for a brief Sultanate.

After the success at Dandangan the lands further West lay open to the Saljuqs. They fought their way across Khurasan towards the Western lands of Iran. By the end of 429/1038, Tughril Beg took over Nishapur, the administrative capital of Khurasan, and in Shadyakh, one of the suburbs of Nishapur, he installed himself on the Ghaznavids' Sultan's throne and assumed the royal title, al-Sultan al-Mu'azzam (Exalted Ruler). His name was read in the official prayer, the Khutba "Friday sermon".
Tuğhrîl offered his services to the Caliph, as leader of the Muslim Community, and styled himself "Client of the Commander of the Faithful". In 447/1055, Tuğhrîl's name was mentioned in the Khutba in Baghdad and Caliph al Qâ'im bestowed on him the honorific titles: "King of the East and west" ("Malik al-Mashriq wa'l Maghrib") and "Pillar of the State" ("Rukn al-daula").

After settling affairs in Khurâsân, Tuğhrîl came westwards. In 434/1042-3, he took over the City of Ray where he established his capital for a time.

The main aim of the Saljuqs was first to occupy and dominate the rich lands of ancient Iranian civilization. When they had first come these were in the hands of local rulers, i.e., Western and Central Iran were in the hands of the Buyids (320-447/932-1055); the Ziyârids (315-483/937-1090) reigned in the Caspian provinces of Gûrgân and Tabaristan; Sistân was ruled by Saﬀâmid Amîrs (253-900/867-1495); and the Eastern territories, Khurâsân, Afghanistan and North India, were in the hands of Ghaznavids (366-582/977-1186).
Secondly, they wanted to hold Iraq as a bastion against the Fatimids and their satellites in Syria and al-Jazīrah; and thirdly to establish full control and unity over the Ghuzz tribes.

There was a great diversity of conditions within Iran at the time of the Saljuq entrance. There was a variety of different groups and communities with different social ethics and local particularization. There was a standing opposition between Turk and non-Turk, and between the semi-settled population and the people of the cities with their highly developed industries and traditions of civilization. In addition the Saljuqs own tribal group of Turkmen who had helped them to power presented a special problem. According to the Turkish views the right to rule belonged to the whole family, though the oldest member had certain rights to the obedience of his male relations. But this did not agree with the Iranian conception of the arbitrary role of a monarch over whole territories; it was the latter view which was to mould Saljuq rule.
In the beginning the Ghuzz acknowledged the leadership of Ṭughrīl Beg as the chief of the whole family, but in fact politically the Saljuq empire was a confederation of semi-independent kingdoms ruled by members of the Saljuq family, over which the Sultan exercised nominal authority.

At the time, the Turkish tradition of rule shared amongst members of the family was dominant in Saljuq military and political organization. But later under the rule of Alp-Arslan and his son, Malik-Shah, with the aid of the Iranian bureaucracy and a multi-national army directed by Turkish slave commanders, the Saljuqs progressed from nomadic chiefs to the position of sovereign monarch in the Iranian style. At the same time they succeeded in establishing full control and unity over their own Turkish people not only through consultation and conciliation, but through the exercise of arbitrary power. Finally uniformity was established throughout the Empire.
Conquering Islamic lands depended upon the Saljuq ability to fight, but to enable themselves to rule over their vast territories they soon realized that they had to adopt the Iranian civilization and existing Iranian government administration. The proverb "You conquered on horseback but you cannot rule on horseback" proved as true of the Saljuqs as of the Han Chinese ruler to whom the advice was originally given. They discovered practical advantages in Iranian theory of government with its exaltation of the monarch above his people, its concept of the obedience of his subjects and its ideal of state centralization with an Iranian staffed bureaucracy and a professional standing army. Thus the Saljuqs who had started out as the leaders of a tribal migration were soon transformed into the rulers of a centralized state, partly by adopting the Iranian culture and their administrative techniques and partly because of Iranian advisers, such as Kundurī and Niẓām a-Mulk. The latter saw themselves as representatives of all the Iranians with a duty and a mission to preserve Iran from the Turkmen anarchy and
to perpetuate the Iranian traditions by civilizing their Turkish masters.

According to the division of authority made by the Saljuqs after the Dandangān victory whilst Tughrīl was occupied with the West, the East remained under the control of his brother, Chaghri Beg until his death in 452/1060. Marv became the capital of Chaghri and remained the centre of Saljuq administration down to the end of Sanjar's reign. He was never tempted into acts of rebellion against his brother. As Tughrīl had no son it was almost certain that one of Chaghri's own sons would succeed to the unified sovereignty of East and West, which, in fact, happened under Alp-Arslan. Chaghri had great responsibilities in the east as he had to defend beyond the Atrak and Oxus, Khwarazm and Dihistan against the Qipchak's pressure. The other Saljuq princes also seperated in different directions; Gavurd, Chaghri's eldest son, was to expand Southward to occupy Kirmān, Kūhistān and Tabas. Musa-Yabghū was to have the frontier territories which accompanied the Ghaznavid kingdom but his
main efforts were, in fact, to be directed towards Sīstān, while Ibrahim Inal, son of Ṭughril's mother, accompanied Ṭughril Westward.

As regards the expansion of the Saljuq empire, the majority of the Muslim rulers of the Eastern and central provinces submitted to Ṭughril either voluntarily or under compulsion. The rulers of Gurgân and Ṭabaristān had done this by 432/1041-2.

In 412/1042, Ṭughril and Chaghri combined for the campaign against Shah-Malik, the ruler of Khwārazm. They defeated him and placed Khwārazm under a Saljuq governor. In the course of the campaign, the Saljuqs also received the submission of the Amir of Qipcha. (14)

In 440/1048-9, Ṭughril sent the Turkish commander, Er-Tash, to Sīstān to help the Sagzi (the people of Sīstān) against the Chaznavids. At that time Sīstān belonged to the Ghaznavid kingdom but they ruled through a scion of the Ṣaffārid dynasty. Er-Tash succeeded in compelling the Ṣaffārid Amir, Nasr b.Ahmad, to submit to the Saljuqs. Ṭughril also ordered that the Khutba and coins should
both be in the name of his brother Mūsā-Yabghū and
gave him a patent of investiture for ʿIṣṭān. (6)

Events in Iran and Iraq prevented ʿUghrīl himself
from taking part in ʿSaljūq raids into Asia Minor. In
general he was content to leave the conduct of warfare
in the hands of his nephew, ʿYāghūṭī, Chaghūrī's son, and
the Turkman ghāzī (Muslim fighters for the Faith). In
the course of their campaign in Asia Minor in 441/1049-50,
Nasr al-Daula Ibn Marwān, ruler of Diyār-i-Bakr
recognized ʿUghrīl's suzerainty and inserted his name
in the Khūṭba. In fact, the ʿSaljūq's westward drive at
the beginning was not an offensive attack against Christian
Armenia, Georgia or Byzantium. Their main aim was
ʿĀzarbaijān's fertile valleys, which provided pasture
for their herds.

Internal discord arose when ʿUghrīl's step-
brother ʿIbrahīm-Ināl, after conquering Hamadān and the
ʿIraq-i-ʿAjam, penetrated as early as 440/1048 with fresh
Ghuzz troops into Armenia and defeated Liparites, chief
of the Abkhaz. This excited the jealousies of ʿUghrīl,
who summoned him to give up Hamadan and the fortresses of Iraq-i-Ajam. In the end Ibrāhīm was compelled to submit, but the distraction caused by his rebellion allowed the Shi'i rivals to the Caliphate, the Buyids, an opportunity for self-assertion. At this time the power of al-Qa'im, the Abbasid Caliph of Baghdad, was reduced to a mere shadow and he was almost wholly destitute of authority. For a year the real ruler of Baghdad was a Turk named Basāsīrī, commander under the last Buyid, Malik al-Rāhīm. Basāsīrī entered Baghdad in 450/1058, acknowledged the right to the Caliphate of al-Mustanṣir, the Fatimid claimant, and inserted his name in the Khūṭba. Al-Qa'im had to leave Baghdad and his place was usurped for some time.

After settling the trouble in Iran caused by Ibrāhīm-īnāl’s rebellion in 447/1055, Tughrīl marched to Baghdad to rescue the Caliph from his Shi'i oppressors. Basāsīrī was defeated and later killed and Malik al-Rāhīm was taken a prisoner. By 454/1062 the rule of the Buyids was extinguished after over a century. Tughrīl re-established the Caliph in
Baghdad. Also he sent his military representative, Shāhna, to Baghdad to watch over affairs there. This campaign not only ended the influence of the Buyids in Baghdad but also frustrated the Fatimid ambitions in Iraq. Furthermore, the new divisions of power and influence in the Central lands of Islam became crystallised; the Caliph being recognized as the spiritual head and the Saljuq sultan as secular ruler of the Islamic community.

The work Tughril had started was continued by his nephew Alp-Arslan, Chaghri's son, who succeeded to the throne in 455/1063. Alp-Arslan's reign of ten years and the succeeding twenty years rule of his son Malik-Shāh form the apogee of the great Saljuq sultanates. During these decades the Saljuq dominions were united under one rule of one man and the energetic and unceasing journeys and campaigns of the sultans meant that this unity was far from theoretical.

When Al-Arslan succeeded to the throne his most immediate problem was to secure it against the interior disturbance caused by members of the Saljuq family such
as his uncle Qutlumush b. Arslân Isrâ'îl and later his elder brother Qara-Arslân Qavurt. They both claimed the right to the succession in accordance with the old Turkish idea of the supremacy of the oldest competent male member of the family. This argument appealed to many of the Turkmen.

In 456/1054, in a battle near Saveh, the tribally organized Turkmen army under Qutlumush were defeated by the professional army of Alp-Arslân and Qutlumush himself died sometime later. (21)

At first Qavurt, who had previously in the reign of Tughril succeeded in taking Kirman, recognized Alp-Arslân as supreme Saljuq sultan, but three years later he removed Alp-Arslân's name from the Khutba and ceased to be content with a subordinate position. In 459/1067, Alp-Arslân himself undertook an expedition to Kirman. Finally Qavurt submitted and gave him his allegiance and Alp-Arslân granted him full forgiveness. Therefore the rule of Qavurt and his descendants was established in Kirman for the next 140 years (433-582/1041-1186). The end of the Saljūqs of
Kirman was brought about by the arrival of the Ghuzz.

In the matter of relations with the Caliphate Alp-Arslan continued 'Tuqhril's policy. He was on friendly terms with Caliph al-Qa'im. Although he never visited Baghdad personally, he was nevertheless concerned to maintain his rights in Iraq. In 456/1064 the Caliph bestowed on him the honorific titles: "Adud al-Daula" (Strong Arms of the State") and "Diyā al-Dīn" ("Light of Religion")

In 463/1071 Alp-Arslan conquered Syria, 'Adan, Yaman and Bahrain and so ended the rule of the Fatimid Caliph over those lands. His policy on the fringes of Syria and Iraq was to maintain Arab emirs as his tributanes while keeping watch on them to ensure that they did nothing to encourage the Fatimid's ambitions in Iraq and Syria. Thus the Fatimids did not dare to interfere there and Iraq enjoyed a period of tranquillity.

It seems the official policy of the Saljuq sultan at this time in the west was essentially one of co-existence between the two great empires, Islamic and Christian, in contrast to the uncontrolled activities.
of Turkmen raiders of ghāzī on the Byzantine and Armenian frontiers in Eastern Anatolia. The Turkmen sought plunder and pasture for their herds wherever they could find them, and their Westward raids through Byzantine territory were because of these needs and not because they wanted to overthrow Byzantine rule in Anatolia. Militarily they were incapable of besieging and taking the Byzantine strongholds there. Nevertheless their spreading out through the Anatolian countryside inevitably led to clashes.

The first major battle between the Byzantines and the Saljuqs took place in 463/1071. It appears to have been caused by the action of the Byzantine Emperor Romanus Diogenes, who assembled a vast army at Erzerum and marched Eastward into Armenia. Alp-Arlan, then in Northern Syria, treated this as a breach of the peace, and made an expedition against Romanus. He personally led his army through Asia Minor. The battle which took place at Malazgird was the first major battle the Saljuqs had ever ventured against a Byzantine army and the most successful. It ended in disaster for the Byzantines. They were defeated and their
Emperor Romanus Diogenes was taken prisoner.

Alp-Arslan adopted a moderate attitude towards the defeated Byzantine Emperor and did not endeavour to destroy the Byzantine Empire. Romanus was allowed to ransom himself by agreeing to pay tribute to Alp-Arslan and ceding the cities of Malazgird, Edessa, Antioch and Manbij.\(^{(24)}\)

This victory over the Christian Empire established Alp-Arslan as a Muslim hero in the eyes of posterity. Furthermore his conquest of Armenia and Byzantium brought into his empire almost the whole of Asia Minor. The foundation of the Saljuq empire of Rum was another immediate result of this great victory. Sulayman (son of Qutulmush) laid the foundation of Saljuq rule over Rum in Anatolia and the dynasty lasted until the emergence of the Beylerbegs who in their turn were overthrown by the Ottoman Turks (707/1307).

Apart from dealing with this great power in the west Alp-Arslan undertook an expedition towards the East to contend with rebellions on the Eastern
fringes of the empire where some local rulers and governors had been trying to take advantage of the Sultan's absence in the west. Eventually he subdued Harat and Jand in Transoxiana. Now the Saljuq Empire extended from Asia Minor and Syria to beyond the Syr Darya.

To prevent a crisis over his succession Alp-Arslan arranged the early appointment of Malik-Shah as Vali'áhd (heir) even though he was not the eldest son. The ceremony took place in Marv in 458/1060 and his name was placed in the Khutba in Baghdad.

Jalāl al-Daula Mu'izz al-Din Abu'l Fath Malik-Shah continued his father's triumph. The lands of the Saljuq Empire became more extensive and under him the empire reached its zenith. Malik-Shah, like his father Alp-Arslan, had primarily to consider the problems of constant conflict with the ambitious members of the Saljuq family and later the crushing of external enemies on the Eastern frontiers of Iran.

In the East Khwarazm and Western Afghanistan had already been wrested from the Chaznavids. Malik-Shah
also invaded Transoxiana. In 488/1095 he conquered Samarqand and overthrew its ruler, Ḥamd Khan, bringing the Qara-Khanids under Saljuq suzerainty for the first time. Later he received the homage of Ḥarūn b. Sulayman b. Qādīr-Khan Yusuf, the Khan of Kashqar in 496/1103.

Malik-Shah's concern with the North-Western frontiers of Iran was twofold; first, to secure Arrān and thus protect Āzerbaijan and second, to hold the route that led up the Araxes into Armenia against any Georgian attack. His attitude towards Byzantium was the same as that of his father, Alp-Arslān: that the two empires should exist side by side. Therefore the events in the Anatolian interior were of less immediate importance than were those which took place on the South-Eastern fringes of Anatolia, in al-Jazīrēh and in Syria.

At the beginning of his reign Malik-Shah sent his brother Tutush to hold Syria as an apanage (the latter founded a short-lived minor Saljuq line in Aleppo and Damascus). In 479/1086, at the request of local
chieftans, he marched West to Syria with the aim of reducing his brother's power. In this campaign Mosul, Harran, Aleppo and Antioch submitted and Malik-Shah had at last reached the shores of the Mediterranean. This marked the highest point of Saljuq domination.

The degree of unity achieved in the Saljuq Empire under Alp-Arslan and Malik-Shah could not be maintained by their successors, although the power of the dynasty under Sultan Sanjar, for at least the first half of the following century, was far from being ineffectual.

When Malik-Shah died his sons were still too young to rule. This gave the ambitious members of the Saljuq family and of the vizierial family the opportunity to use the succession dispute to further their own purpose. Finally this dispute split the Saljuq Empire into two: The Saljuqs of Iran and Iraq. Malik-Shah's third son, Sanjar, ruled over Khurasan and Eastern Iran; his elder brother, Muḥammad, and later his sons, ruled over Iraq and Western Iran. Their authority was in practice confined to Jibal and Central Iraq. The centre of gravity
of the sultanate tended to shift Eastward to Khurasan under sultan Sanjar, the last sultan of the great Saljuq line who, after the death of Muḥammad in 511/1118, exercised ultimate sovereignty over his relations, the Saljuqs of Iran.

Signs of internal disorder became more apparent among the Saljuqs of Iran as the power of the Saljuq sultans continued to decline and the dynasty became disunited within itself.

The Turkish slave commanders who acted as tutors (atabeg) of the Saljuq princes usurped the power of their charges and set themselves up as provincial governors. Eventually these atabegs became so powerful that in many cases they gained independence and succeeded in founding hereditary dynasties such as the Salghurids in Pars, the Zangids in Mosul and Ahmadilis in Arran and Azerbaijan. Thus Iran began to split up into semi-independent units.

The revival of the Caliph's influence was another factor in the decline of Saljuq power in Iraq. The Abbāsids
who survived a period of degradation in the 5th/11th century regained their power in the 12th. Their opponents, the Buyids, no longer existed and the Fatimids had been expelled from Iraq and Syria and since the death of al-Mustansir were no longer an expansionist power. The disputes over the succession to the sultanate in Iran gave the Caliph the opportunity first to consolidate his position in Baghdad by banishing the Saljuq Shahna (who had since Tughril's reign had the control of the Caliphate affairs) in 547/1152 and then to take part directly in the warfare in Iraq and Western Iran for the first time.

Assimilating the less cultured Turkmen was another problem for the Saljuqs. The Ghuzz tribe were always a serious danger to the Saljuqs but the power of the sultan had more or less held them in check until the death of Malik-Shah when the dynasty's subsequent weakening helped the Ghuzz to grow powerful. The Ghuzz in the neighbourhood of Marv and on the borders of the Saljuq empire were increasing in number and encroaching on the settled rich lands. They became difficult to control as they regarded
themselves as the special subjects of the Sultan. Their relations with Saljuq were marked by a standing opposition between their demands and those of the settled population. Finally they rose in rebellion; Sanjar marched against them but was defeated and made prisoner. Khurasan was lost to the Saljuqs.

Despite their military success, however, the Ghuzz disunity and their low level of political and social sophistication prevented them from establishing a territorial administration in Khurasan.

The disunity and fragmentation of the Saljuqs became more pronounced after Sanjar's death in 552/1157. This encouraged the Shah of Khwarazm (Khiva on the lower Oxus) a new aggressive power in the North-East of the Iranian world, to lead his troops Westwards into Iran. Eventually in 590/1194, in a battle which took place near Ray, Tekish defeated Tughril b. Arslan, the last Saljuq sultan of Iraq and vanquished the Saljuq dynasty. (28)
FOOTNOTES TO CHAPTER I

1- "After their appearance in the accounts of Saljūq origins, the Qinig disappear wholly from history. Therefore, the 7th/13th century Armenian historian, Varden, calls Tughrīl, the Saljūq sultan: "Leader of the Doger Tribe," - one of the Qghūz tribes which did play a significant role in Northern Iran. But as Cahen has suggested; Tughrīl might be considered as the head of the Doger in his capacity as chief of a coalition of tribes". C.E. Bosworth, in The Cambridge History of Iran, vol. V, p.42.


3- Mīrkhwand, vol. IV, pp.85; Lane-Poole, pp.150-1; Zambaur, p.221; C.F. Cahen "Le Malik-Nāmeh et l'histoire des Origines Seljukides, "Oriens, vol.2 pp.41-4; Bosworth, Ghaznavids, pp.219-23.
4- Mirghwänd, vol. IV, p. 87; Ḥamd Allah Mustauffī, Tārikh-i-Guzīda, p. 434.
5- Gardīzī, Zain al-Ākhbār, p. 67; Abūl-Faḍl-i- Bāhāqī, Tārtkhi-Masūdī, pp. 500-2.
6- Gardīzī, pp. 70-1; Bosworth, Gaznavids, pp. 224-5.
7- Mirghwänd, Raudat al-Ṣafā, vol. IV, p. 102;
8- Bāhāqī, pp. 616-34; Gardīzī, Zain al-Ākhbār,
    pp. 107-12; Ibn al-ʿAṯīr, al-Ḵāmil, vol. IX,
    pp. 329-33.
9- Bāhāqī, p. 553; Ḥāfiz-i-Abrū, vol. IV, p. 43;
    Būndārī, Zubdat al-ʿUṣra-wa Nukḥbat al-ʿUsr, in
    Recueil de textes relatifs à l'Histoire des
    des Seljoukides, vol. II, pp. 7-14; Rāvandī,
    Rāḥat al-Sudūr, p. 97; Ibn al-ʿAṯīr, al-Ḵāmil,
    vol. IX, p. 328; Zāḥīr al-Dīn Miḥāpūrī, Saljūq-
    Nāma, p. 15; Mirghwänd, vol. IV, p. 102-6.
10- Rāvandī, pp. 102-4; Ibn al-ʿAṯīr, vol. IX,
    pp. 380-1.
12- Chaghri, E.I., (2nd ed.)
15- Tārīkh-i ʿĀstān, p. 127
17- Ibid. vol. IX, p. 380.
21- Zāhir al-Dīn Nīshāpūrī, p. 22; Bundārī, pp. 28-9;
22- Bundārī, pp. 29-30; Zāhir al-Dīn Nīshāpūrī, pp. 23-4; Rāvandī, p. 118; Ḥusainī, Akhbār al-
   Daula al-Saljūqiyya, pp. 23-6; Ibn al-Athīr,


27. C.F. Cahen, "Atâbak" E.I. (2nd ed.).

28- Zahir al-Din Nâshâpurî, p. 45; Ravandî, p. 171.
CHAPTER II

THE ROOTS AND CHARACTERISTICS OF SALJŪQ METALWORK

During the Saljuq period in Iran innumerable artisans found in metal-casting the most satisfying medium to express their talents. They were not unaware of contiguous cultures but the work they produced was much ahead of its time, of a greater originality and freshness of invention, of a consistently superior standard throughout its sustained productivity and of a more accomplished craftsmanship.

To appreciate its qualities it is essential to understand something of the character of its decoration, its origins, its dependence on its cultural environment and the constantly new styles and techniques that re-vitalized it.

Up until the eleventh century there was little change in traditional shape and pattern despite the invasion of the Turkish Saljuqs. There had been no break in the art process and this continuation of
techniques and style was encouraged by the great Saljuqs. Nevertheless within the set framework of tradition a new and creative era began, with infinite variations and elaborations of the earlier art forms and a constant inventiveness.

The Saljuqs re-introduced some ornamentation which was essentially Persian, dating from the days when the Sassanian Empire extended beyond the Syr-Darya and it was the appreciation of the indigenous art forms that gave it a new impetus in the country of its origin. This was most noticeable in the Sassanian iconography which, slightly re-shaped, was brought back into fashion. Certain standardized forms such as medallions, rosettes and pearled frames all first developed in Central Asia where Iranian motifs were immediately accessible.

In fact for the most part once the Saljuqs had established their rule it was to the benefit of traditional arts and crafts. The Persian artists and artisans, under the patronage of their new masters, had at last the security for the full flowering of
their varied talents. Without losing any of the strength and richness of their old tradition and within the control of its framework they were yet capable of bringing to their work an astonishing freshness of expression, coming closer and closer to perfection in one medium after another. For instance the technique of inlaying as practised by the ancient, Pre-Saljūq artists became more advanced and much more widespread, and the new stress was on ornament (See icf. p.).

The most important aspect of the Iranian art of this period is the emphasis on various decorative techniques in metalwork and such other art forms as pottery and architecture. Despite the traditional restraints on excess as time went on even the lettering of the Qurānic texts lost the starkly functional purpose of script and developed a positively rococo elegance.

Beauty of form, technical perfection, these basic characteristics of Saljūq metalwork, were the result of a combination of historical, cultural, religious and economic factors.
Saljuq art is not simply the art of one particular people at one particular time. It is the work of an age, of a whole civilization that has been conditioned by a multiplicity of circumstances. For instance, as time went on the art of the great Saljuq of Iran became increasingly different from that of the Saljuq of Rûm; in architecture Byzantine influence was obvious, but there were modifications necessitated by climatic conditions - hard winters made it necessary to cover the ceiling of the mosques's Ivans. In Anatolia at the beginning of the period neither pottery making nor metalwork flourished as they did in Iran.

The Saljuq conquest of the Persian lands had enforced a unity of rule on a vast territory and by so doing had not only stabilized political and economic conditions but had provided a security in which Iranian art was revived and brought to a magnificent renaissance.

The Saljuq empire stretched from Central Asia to the Western part of Anatolia and Syria thus bringing Central Iran into closer contact with the outlying North-Eastern regions and the crude but vital nomadic culture of Central
Asia.

Under the Saljuq’s control lands as widely divergent in background, customs, character and culture were brought closer together under the protection of a central authority. The separate regions retained their identity but their people were more free to travel. Artists peregrinated from place to place settling to work wherever material and patrons could be found. Such mobility meant that there was a constant interchange of techniques, styles and methods of working between areas far remote from each other.

The rapid development of crafts was undoubtedly due to increased political stability. Industrial activity increased and as it did so did the organization of craftsmen. This meant main producing centres could be set up throughout the empire.

The Saljuq invasion had in the first place resulted in vast population movements and these led to further contact and inter-relation between Eastern and western Asia and the opening up of a trade route along which ideas as well as goods could travel. Commerce flourished. Products were exported throughout Islam and far beyond, and all this
increased trade was naturally reflected in the growth of wealth and population in cities where arts were in demand and craftsmen of all kinds could ply their crafts.

They throve on this general prosperity as much as on royal patronage. Royal taste, the inborn connoisseurship of the sultans, had helped the old Sasanian tradition to survive and because it had found favour in royal eyes it was once more returned to fashion. But the productivity of the metalworker was so prodigious that it needed more than august patronage. It depended as much on the number and generosity of less lordly patrons. Indeed their support was probably a more important factor in the rapid development of the craft even though the high standard it sustained derived from the original inspiration of the great Sasanian artists.

1. **The Influence of Sasanian Metalwork on Saljuq Metalwork.**

The Sasanians, the native dynasty of Iran, had been patrons of a period of remarkable metalwork (226-642) when its technique had made immense progress - as can be witnessed in the specimens still extant. Their ewers,
cups and bowls in gold, silver, silver-gilt and bronze rank amongst the finest vessels ever made. They show the skill and talent of their makers. Every technique, casting, carving, engraving, repoussé work and niello, were used to adorn the imperial ware with scenes of the chase and of court life, of fable and of fantasy.

One good example of the carved and engraved late Sasanian work, which bears a similarity to the work of the later period shows a carved, engraved figure of the "Simurgh", a strange mixture of lion, peacock and dog. The figure and border are left in silver, the background is thickly gilded. This dish may date from the 7th century or perhaps be post-Sasanian.

Another example of an advanced technique used in Sasanian metalwork which greatly influenced the Saljuq craftsmen is their inlay work. Copper inlay was used early in the Sasanian period. A bronze ewer with inlaid work that is typically Sasanian has a pear-shaped body, a superb lion-handle and is decorated with stylized flowers in the calyx of each of which is cut a circular cell inlaid with
copper. The most remarkable feature of this is the lion on the handle which is so vividly realized that despite its exaggeratedly elongated shape one can imagine that the beast has just reared up and one can almost feel the effort it is making to stretch just a little further. This figure of an elongated, attenuated, rampant feline appeared on many of the Iranian Saljuq metal vessels throughout the 12-13th Cents. (See Pls. 4, 18, 33, 34).

There are also small groups of copper-inlaid post-Sasanian ewers in the Hermitage Museum. On one of these is the design of two peacocks facing a palmette tree. The eyes and crests of the birds, the collars around their necks and the leaves on the tree are all deeply inlaid with circular and rectangular pieces of copper. This last technique, however, using a separate metal almost as mosaic appears to have less in common with the Saljuq's school of metalwork art of inlay than with the earlier fashion found in Iran and on the Steppes in which the
inlay is incrusted with turquoise or pieces of coloured
glass but that it did nevertheless exert a very positive
influence on the later Iranian's superb employment of inlay-
work is certain.

The fall of the Sasānian dynasty after the Islamic
conquest did not altogether disrupt the crafts of Iran, but
it did weaken their development. There was no abrupt change
of style nor any innovation of technique. Instead the
artisans seemed to wish to cling with a sort of timid
tenacity to the earlier Sasānian traditions. Perhaps it was
a lack of courage, of inspiration, of patronage, protection
and encouragement but they appeared to have nothing of their
own to express. So far as metalwork is concerned the sole
importance of this period, which can be termed the
transition period, is that it did at least preserve the
ancient traditional skills so that they could be handed
down to their successors.

The source of life, therefore art, in Iran during
these early centuries of Islam differed from that in
other Islamic lands.
Firstly this was because the people of Iran were not of Arab stock; secondly because they had been in close contact with Central Asia and the civilizations of the Far East; thirdly the Iranian was the direct heir of the proud Sasanian culture for after the fall of the great Sasanian dynasty in 642 early in the Islamic time their empire was divided into separate kingdoms each ruled by a series of native princes (cf. p. 15) who had preserved the Sasanian heritage, and it was through them that the Iranian Saljuq artists had acquired their admiration for it.

Here we should firstly establish the influence of the Sasanian prototype on the post-Sasanian arts. It is the Sasanian tradition that endures, strong and unchanging, within Iran during the early Islamic time. Some of these forms survived the depression of the Arabic conquest which they must morally have helped to bridge and actually lasted into Saljuq times. The following examples should illustrate this point:
1. The enormous energy of the Sasanian bronzes survived particularly in Tabaristān, the mountainous area south of the Caspian Sea where the small kingdoms held out for more than a hundred years after the Arab conquest. There are some examples in the Hermitage Museum bearing the name of these rulers such as: A parcel-gilt dish in the Hermitage which has a design of a mounted bowman shooting a lion bears the name of Ṣhawrīn, whom, according to D. Barrett, was the name of the ruler from the Masmoghān dynasty which ruled over the part of the South of the Caspian Sea until 758 A.D.⁷

On the second piece in the Hermitage Museum, the words inscribed are the name of Spāhbad of Mazanderān, Dādburzmihr, son of Farrūḵhān Gilgīlān. This piece has a representation of the goddess Anahita playing a flute, which is very similar to the Sasanian bowl in the Archaeological Museum of Tehran (Pl. 1). This particular motif appears again on Saljuq metal work with a music player (Pls 24, 65a-b).
This piece, like the other, was made in the North of Iran, during the first half of the 8th Century A.D.

A post-Sasanian inlaid ewer in the Walters Art Gallery, Baltimore\(^{(11)}\) retains the characteristics of its earlier prototypes; its shape and ornamentation with interlocking quatrefoil and overlapping segments are typical Sasanian elements.

2- A little of the metalwork of the 9th and 10th Centuries has survived. Amongst them are a few jugs bearing the names of Būyid rulers. However several scholars have expressed their doubts about their authenticity: A gold jug in the Freer Gallery of Art\(^{(12)}\) (No. 431) is decorated in low relief with winged creatures within stiff scrollwork, which is later repeated in Saljūq metalwork. A Kūfī inscription gives the name of "Abū Mašûr Bakhtiyâr" (died, 367/978), a member of the Būyid dynasty at the court of the Caliph of Baghdad.

3- There are two silver jugs in the Hermitage Museum that\(^{(13)}\) are possibly the best examples of Sāmānid metalwork. One was excavated at Samarkand,
the other at Naishāpur in Khurāsān. One is carved in low relief with full and half palmettes enclosing birds embossed in the round, a feature that was to assume considerable importance in the metalwork of the Saljūq period (Pls. 5, 16, 34, 65, 71).

4- There is also a 10th Cent. silver treasure in the Gulistān Museum, Tehran, of thirteen pieces, seven of which are inscribed with the name of Amīr Abul-ʿAbbās Valkīn, who may be a Daylamid Prince. The shape and technique of these objects are essentially Sasanian. Amongst them is a silver ewer (Pl. 17) with a pear-shaped body (H. 25cm.); this shape is to be found again on Saljūq ware though in a more elaborate form (Pl. 18). Its only decoration is the band of early Kūfic in niello around the upper shoulder containing good wishes and the name of its owner:

«بِرَكَةٍ عِنْدَ رَّبِّكَ وَسَعَادَةٍ طَالِعِهِ وَسَلَامَةٍ شَامِلَةٍ (عَالِيّ) حِيَلاً لَّغُيْهُ فَانِيَةٌ وَالرُّوْلَةٌ تَمِيمًا وَأَمَرُ طَالِعِهِ وَعَاذَقُهُ عَزَّ وَجَهُ مَنَ وَصَرُرْ وَقُصْطِحُ عِنْدَ الْامِيرَ ابن الْمُباَسَر وَكَلِينَ بن هُرُون مُولِّيِ امْرَامْهِنَّ.»
Now, we should establish an iconographic relationship between the Iranian Saljūqs and the Sasanian heritage, mostly the courtly scenes. It is generally acknowledged that the display of the different aspects of court life which became one of the main motifs in Iranian Saljūq art is a theme which draws upon Sasanian Royal art. Thus the leading motif is the image of the king, his royal activities and pastimes. Sometimes the various entertainments had been symbolized in Sasanian art only by isolated figures. A bowl in the Hermitage Museum for instance, attributed to the 6th Cent. displays the enthroned king between four courtiers and in the lower section there is a hunting scene.\(^{(16)}\)

In view of this well established artistic tradition, it is evident, therefore, that the Islamic royal setting represents a traditional theme descended from Sasanian prototypes. This heritage provides us with an answer to the survival
of some elements of decoration like the one on the Bobrinski bucket of an enthroned figure at the middle of a roundel (Pl. 4), or at the central zone of the 12th Cent. dish (Pl. 12) which depicts an enthroned prince, guarded by a lion in front of the throne in the Sasanian fashion. The most important example can be seen on the middle of the crest of the 12th Cent. bronze statue of a bird (H. 36 cm) in the Hermitage Museum (Pl. 74). A crowned prince is depicted wearing a belt with its end loosely hanging down. He is sitting cross-legged on the throne and is guarded by a lion lying down in front of the throne. He is holding a lion on his right hand and a falcon is seated on his left hand thumb. This was a victorious sign after a successful hunt or indeed was an emblem of power and sovereignty.

The influence of the Sasanian prototype is clearly apparent in a silver dish in the Hermitage Museum on which an attack on a fortress is depicted—a popular theme for vessel decoration. According to J. Sauvaget (17) this silver dish in the Hermitage Museum was made during the reign of Sanjar in the late twelfth century, which would make it Saljuq and not Sasanian work as was hitherto believed and the fortress
would be the Saljuq fortress in Narv while the
king depicted would be the Sultan Sanjar himself.

There is another example amongst the Mina'i
pottery of Rayy in the Freer Gallery of Art, Washington,
D.C. which has the same motif - the siege of a castle -
and which is very similar to the Hermitage silver dish.
This kind of figure remained popular for a long time,
particularly in the Caucasus and its traces can be seen
in a collection of metal work from Dagestan now in the
Hermitage. One especially interesting example is a large repoussé bronze cauldron now in the Victoria and Albert
Museum, London, which can probably be dated to the 12th
century.

Indeed the style of Sasanian metalwork was so
firmly established that it would have needed a very
vigorouSo effort to overthrow or even to change its
development and neither the Arabs nor later on the Turks
had either any style of their own to impose nor any
wish to destroy the existing culture as they found it.

Many links can be traced between Saljuq metalwork
and that of the earlier Sasanian era. Artistically the Saljuq metalworker gained much from the earlier Iranian influence. The Iranian paid less attention to the religious ban against the depiction of images, retained their traditional methods and went on illustrating the old themes and subjects such as the enthroned prince and the musicians or the chase or horsemen on either side of a cosmological tree, and these same scenes recur often on Saljuq work in an expanded and fuller form (Pls. 4, 12, 16, 56, 65, 73, 74).

Usually the figures are in separate units, side by side, as in the scene on the Bucket of Harat (Pls. 5).

Animal Figures

This repetition of Sasanian design in Saljuq metalwork is still more noticeable in episodes involving animals. The animal procession, in accordance with the spirit of the times, becomes more active with the animals in full cry, their bodies more elongated than ever. The lions of the Achaemenides which were no less vigorous on the Sasanian silver plates become on the Saljuq brass ware the emblems of power and sovereignty (Fig. 61/2, Pl. 12, 23a, 27, 31, 32, 33, 34, 73, 74).

The one animal style maintains Sasanian heraldic
form with foliated appendages and interior ornament (Pls. 20, 64) but the simple continuous outlines have been modulated to naturalistic details. Fur and feathers are still drawn in formalised pattern. Both the geese and the goats on the Alp-Arslân salver (Figs. 61/62, c.) show one delightful conventional detail, a decorative rendering of the eye as a compound spiral. The interior anatomical structure is however no longer made explicit. Similarly horns are no longer affronted on a profile head while wings instead of being turned in a scroll are straight and harp-pointed. The pure heraldic immobility has been relaxed. These animals not only convey a vivid impression of animation but characteristic gait and personal character (Pl. 10.).

The animal compositions also follow Sasanian models; sometimes the animal is on a large scale almost filling a circle, either symmetrically or with compensatory balance, and with the interstices filled with secondary motifs to form a complex coverage though not a really dense pattern. (Pl. 35). Some Sasanian metal vessels, however, show another composition which also has Sasanian precedents. One theme is allowed to
cut straight across the circle, leaving segments above and below, as in some of the hunting and other illustrative scenes on the Sasanian plates. But here the animal motifs have been relegated to the segments, giving priority to a section of Kufic inscription, and the three units have been bound together by the continuation of plain marginal bands into a rudimentary entrelac (Pl. 34).

Another animal episode that illustrates the influence of the Sasanian heritage more clearly, is the Sasanian theme of a falcon in the act of attacking a goose of duck. This narrative interest is really a symbolism whereby decoration is used as a form of language (Fig. 69/d). This motif appeared on the Iranian Saljuq metalwork sometimes as a traditional wish for power and success for the owner of the object, like on the inkwell in the Metropolitan Museum of Art.\(^{20}\) Sometimes however this scene appears simply as a typical descriptive hunting scene of the Saljuq period as for example it is depicted on the late 12th Cent. inlaid brass jug in the British Museum. In this instance the falcon is not only attacking the goose, but also a hare and other beasts in separate medallions which complete the hunting scenes which cover the jug.\(^{21}\)
Also the frieze of running animals (Pl. 9), gained an importance along with the tendency to narrative, as on the Bobrinski Bucket on which the composition is of equestrian figures (Pl. 4).

The former principle of dismemberment which had disappeared from the Iranian use of animal images returns in a curious variation. Naskhī letters on the Bobrinski Bucket terminate in human half-figures, those vigorously typical Saljūq motifs, while others are turned into animal heads, the more conventional motif (Pl. 4).

Vegetal Motifs:

Many old motifs were dropped during the Saljūq period, such as the true palmette which gave place to the acanthus and the vine, and in many cases, by co-operating to conquer, losing their separate identity. There was also a regeneration of the lotus (Figs 64 a, b, c), and rosette, which reappears sometimes in its old role as a sun symbol (Pl. 145). The rosette itself was a common motif on the metal vessels of this period (Figs. 65 a, b, c) and appeared on dated objects from Harāt, such as the Bobrinski
Bucket, where it appeared on the rim next to the historical inscription (559/1163) (Pl. 4). It also appears on the bronze aquamanile (603/1225) on the neck of the cow (Pl. 73). But its presence next to the lion figures can not be due to the whim of an artist or to a temporary fashion, but must have had some long-established connection with the sun. However we should assume that in the 12-13th Cent. this particular theme could also have been interpreted in a new, though related, manner. If we survey the objects of Iranian art of earlier times, we have to go back to the Achaemenian and Sasanian periods, when there was indeed a close relationship between the lion and sun. While we are not concerned here with the combination of lion and sun prior to those early periods, nor with its precise meaning at that early time, we intend to emphasize their early connection with ancient heritage. The "sun and lion" motif appears on several metal vessels of late 12th Cent from Eastern Iranian workshops. Amongst these are: two bronze ewers in the Hermitage Museum (Pls. 24, 28) and one in the Metropolitan Museum of Art (icf. p. )
Many motifs continued unchanged while others were presented in new forms, often the result of the combination of two styles. The total range is large, though the conventional elements are comparatively limited unless as is very probable some of those found in the thirteenth century metalwork had already been in use. The oldest are the quatrefoil lattice and Sasanian triadic form which has been maintained. The tree has become less important than it was, and the old symbols are remembered, in part at least, only to stimulate new invention (Pis. 31, 14, 13, 73). The Sasanian crescent (Pis. 26, 29) and arcades both reappear, but the latter is slightly in a florid disguise (Pis. 4, 7). The Sasanian pearl band (Pis. 50, 58) and egg-shaped patterns (Pis. 35, 14) occasionally fulfils its Sasanian function of forming a band. All these modifications accorded to the taste of the time.
Obviously it was in Inner Iran, the cradle of the Sasanian dynasty, that more Sasanian traditions were conserved than anywhere else. Early in the eleventh century when the Saljuq conquerors had removed the barriers it came into close contact with the outer Iranian lands. It was therefore not surprising that Saljuq metalwork should have been inspired and formed by Sasanian traditions and that Iranian artists should have based their art on this particular heritage. Nor is the persistence of the Sasanian style surprising. Craftsmen, particularly metalworkers, have always in all times and places tended towards conservatism, and in this particular instance this natural tendency would have been reinforced by the widespread prestige won by the Sasanian artists.

In many aspects the Sasanian and Saljuq dynasties are similar, with many things in common. The Iranians during the Saljuq domination were conscious of the former glory of Iran and of their obligation to protect
and enhance it. The Shi'a movement also lent strength to this special brand of patriotism. The natural power of the people combined with the effective organization of national life brought them resounding victories. Thus once more Iran ruled part of western Asia and gathered tribute from the Syr-Darya to the Mediterranean coast and official art expressed itself in the most impressive forms of Iranian tradition.

But if during the early Islamic period the artisans conformed closely to the Sasanian prototypes, having nothing of their own to express, later under the Iranian Saljuqs, craftsmen began to introduce much that was intrinsically their own inspiration. Saljuq art has certain traditional conventions in common with Sasanian, but it does, as well, have much that is its own unique and special quality and charm. The Saljuq metalworker used his own methods to create something wholly new. And they were responsive to changes in taste and to foreign influence.

The Iranian craftsmen of the Saljuq period may have owed much to their Sasanian predecessors but they did not
allow themselves to be limited by them. Reverence for the old did not inhibit their creative impulse and their fame rests as much on their own initiative and style. This was an epoch of creation and productivity. These artisans formed a definable school which is easily recognizable, their products have a special colour and style and form which is known as "The Saljūq Style," (i.e. ch. VIII).

Also, there is a recognizable relationship between this Saljūq style and the successive eras. The Iranian Saljūq artists have greatly influenced all the art that has followed.

In spite of having roots in the past there were some other factors which influenced Iranian Saljūq metalwork; one of the most important and prominent ones was the Islamic religion.
FOOTNOTES TO CHAPTER II:

2- The name of the legendary bird.
4- Barrett, D., Ibid., p. 8.
10- Spahbadan were originally amongst the most noble
and high ranking families during the Sasanian times. Also the rulers of Tabaristan during the first century after the Arab conquest used to be called "Spahbadan". Moin.M, An Intermediate Persian Dictionary, (in Persian) vol. I, (Tehran, 1963) p. 234. However D. Barrett has referred to it as the Spahbad of Khurasan" (Barrett D. Islamic Metalwork in the British Museum, p. 6.)

11- See Ettinghausen, R., Apollo, 1966, Fig. 3.
13- Smirnov, Y.I. Ed. Oriental Silver (Argenterie Orientale), (Imperial Archaeological Commission), (St. Petersburg, 1909), Pls. LXXI-LXXII.


21- Barrett, Islamic metalwork in the British Museum, Pl. 8; For a general view of this jug see Piot E., Cabinet de l'amateur, (Paris, 1844) T. III, pp. 385-92.

22- See Survey, Pl. 311/b.
In general the importance of religion during the Saljuq era is twofold; first is the role it played in the development of the political institutions, second its influence on Saljuq literature, art and architecture. In some instances indeed the impact of Islamic ideology on aspects of Saljuq art is so strong that to understand it completely it is necessary to have some knowledge of Islamic doctrine.

This was the time when the theological system of Islam became formalised and the philosophy of Sunni-ism was formulated and its polemics conflicted with those of the sect of Shī'a; the Ismā'īlīs developed their own doctrine which eventually resulted in their revolt; and there was the slow emergence of the mysticism of the Ṣūfī-Ṭariqat School. (1)

Iran during the Saljuq era was predominantly Sunni in its religious thought though at the time of its rise
to power the Shi'a sect was already strong in Tabaristan, Dailam, Kirman, Khuzistan and Fars where it was protected by the Buyids. Of the numerous Shi'a sects only two retained importance in the period of the Saljuq dynasty - the Twelve Imami and the Ismaili.

The great dividing line between Shi'a and Sunni, which in truth was more political than religious was the succession of the Prophet and the Imamate. The Ismailis, for their part, were different again. They went along with the Shi'a belief in the anointed succession from Ali but, unlike the Twelvers, only as far as Ja'far al-Sadiq, the sixth Imam. After him they broke from orthodox Shi'a thought and recognized Ismail, the eldest son of Ja'far, as the seventh and last Imam.

So it was that while Western Islam was led to a spiritual regeneration, through the reforms of al-Ghazali, in Eastern Islam the course of history was directed by the growing influence of Ismailism which
between the fifth and eleventh centuries carried its revolt against Sunnism far and wide and this had an importance beyond religion for although their creed was based on religious grounds it had an essentially nationalist motive.

The Shi’ā and Ismāʿīlī sects in fact had succeeded in bringing about an outbreak of political and religious heterodoxy in Iran. The struggle was between the pure line of Sunnī religious thought and the Persian patriotism with its anti-Arabic, Turko-phile sentiments and its official and military aristocracy, most of whom resented the waxing power of the Saljuqs.

Ismāʿīlī destiny can be traced through four phases; in the beginning they met with failure; in the second phase they re-organised under ʿHasan i-Ṣabbāḥ into a strongly based force free of Fatimid ties; from this they progressed to the third period during which they spread their doctrines amongst the people. In the fourth phase their hope of extending their faith far beyond the Saljuq territories was only ended by the all-conquering Mongolian armies in 654/1256.
Saljuq opposition to all forms of Shi'aism was more based on political than religious grounds as stated in the writing of Nizam al-Mulk. He wrote of the close connection between kingship and religion and regarded the Sunni religion as necessary to the stability of the Saljuqs and of the state.

Iranian pride in their own institutions and traditions helped to maintain them. Nevertheless, both institutionally and artistically, as the laws of Islam were accepted so did the Saljuqs have to give a religious justification for all they did. The old Persian art forms remained but within them, and permeating through them, was the new philosophy of Islam.

But despite the extent to which Saljuq art served the Islamic faith it must not be considered as religious art. It was however inspired by Islam just as in every way of life, artistic and institutional, change and development came through the new theology.
The powerful spiritual current of Muhammad's doctrine reached Persia about the middle of the seventh century AD. The Persians adopted it with great fervour. To them it brought a re-awakening of faith, new dispensation, new values, new loyalties and new opportunities.

The history of the developments in Iran during these early centuries of Islam differed from that of Mesopotamia, Syria and Egypt. The reason for this is simply that these were the Persians, the cultural heirs of the Sasanian empire. Also the area was in close contact with the Turkish tribes who brought with them a crude but vital culture.

Conquest of the ancient territory of Persia by the Arabs brought unity under the religion of Islam. Art grew from the traditions of these lands, inspired by the new ideas and faith. The new era of art had begun.
The Iranian artisan's response, however, was not immediate. Not until some four hundred years after the Islamic conquest was the influence of their new faith really apparent. The circumstances attendant on the decline of the Sasanian dynasty were not conducive to art. Not until political, economic and cultural unity were established under the rule of the great Saljuqs was there a climate productive of great art and literature and the opportunity provided for artists and artisans to explore the potentiality of their talents.

It was a renaissance of art. Yet there was no break with tradition. Within the great traditions the new Islamic idealism expressed the spirit of its time.

Now Saljuq art became more meaningful, more refined and sophisticated; enriched and bold in its greater emphasis on ornamentation and characterised by an infinite multiplicity of subtle variations of detail. Now was the finest flowering of all
Islamic art. It is not presumptuous to claim that this epoch of the Iranian Saljuq artist, when Islamic thought was implicit in old Persian tradition, is the most vital in the history of Islamic art.

The Arabs, originally nomads, were not, of course, the bearers of a great art. Their contribution to the culture of this vast empire was threefold: the religion of Islam, the Arabic language and the magnificent Arabic script. The old Iranian traditions continued to exist and became paramount throughout the Islamic world, but later the influence of the Islamic ideology made itself felt in Iranian art and architecture.

The impact of Islamic ideology on Saljuq art should be studied in four aspects: its general influence on the spirit of the art; its effect on the Iranian School of painting and iconography; its effect on the new styles of calligraphy and Qurānic art and its influence on architecture.

The religion of Islam moulded the dominant character of art in one important respect; it held
that man should not focus attention only on his bodily aspect. So the Iranian artist adopted this ideal and chose to work mostly in abstract form.

In fact there is no Quranic prohibition against the representation of any living form in Islam, nor is there any objection to the work of any artist who has tried to imitate God who alone can create living creatures. Yet there has been a misinterpretation of certain pronouncements attributed to the Prophet and and quoted in the Hadith (5) and it is these which have caused controversy amongst theologians. The Prophet had said that "no angel will enter a house in which there are images". (6) But "images" may not necessarily mean works of art as it was interpreted by the early Islamic teachers. In this context "images" may be taken as idols, objects which are worshipped, such as the images of the old gods worshipped by the Arabs before their adoption of the faith of Islam.

Nevertheless this idea had greatly handicapped the arts of painting and sculpture in most of the Islam dominated countries. But in Iran, the Iranian Islamic artists accepted Islamic idealism free
from the conception of fanatical theologians, adapted to it the old Sasanian traditions and this continued throughout the Saljuq period. Figural art continued though the highly organised plasticity of portraiture is lacking. Nonetheless stucco sculpture was produced in the old Iranian pre-Islamic style. These were small works on walls and in them are representations of human heads. The best example extant dates from the 12th century and is the head of a Saljuq prince which was found in the ruined palace of Rayy and is now in the Metropolitan Museum of Art. (7)

The metalworker used his indigenous technique to make small round objects in the shape of birds or animals, usually hollow, to serve a functional purpose such as oil lamps (Pls. 36, 37, 39), incense burners (Pls. 48, 49), and sometimes only some part of the vessel was in the shape of a human or animal (Pls. 40, 45, 65), or they also made some metal figurettes (Pls. 73, 74).
At this point we should concern ourselves with what is perhaps the most important influence on Iranian Saljuq art, the influence that purified and perfected it, and this is the influence of Sufi mysticism. Its importance to Saljuq art is that it gave to both art and literature a special religious sanction and this kept it alive and established within its traditional form. This is why it is wrong to describe all the designs on Saljuq metalwork as wholly decorative, since some of these elements are inspired by the symbolism of Sufi mysticism, but this is only discernable to the initiated eye.

The influence of poetry is also observed on Saljuq metalwork. In many cases, especially when the identification of some portrait figure is obscure on Saljuq metalwork, particularly in romantic or heroic legendary scenes, the clues to identification can be found in contemporary poetry. For instance, the romantic scenes of the legendary love story of one of the Sasanian Kings, Bahram Gur and Azadeh, which is depicted in some of the metalwork (Pl. 18)
and pottery of the Saljuq period, this is presumably derived from the contemporary Mathnawi Haft Paykar "Seven Portraits" by Nizami of Ganja (8), who, likewise, drew this theme from Firdowsi's Shah-Namah, "The Book of Kings". (9)

Although the sources of the Iranian Saljuq style of design is varied and is a compound of old Iranian tradition, Islamic elements suggested by Islamic ideology and the new motifs which developed in Iran within the period, nevertheless it is by no means eclectic for it brings together into one coherent whole the old and the new and re-fashions it into something that is essentially of the Iranian Saljuq period.
FOOTNOTES TO CHAPTER III


2- Ibid. p. 286.

3- Hodgson M.G.S., The Order of Assassins, p.9.


5- al-Hadith, "It is an account of what the Prophet said or did or of his tacit approval of something said or done in his presence", The Encyclopaedia of Islam, (New Ed.) vol. III (London, 1971) p.23.


7- Arnold, op.cit. p.32.


Chapter IV

The Style, Arrangement, and Characteristics of the Decorative Ornamentation of Saljūq Metalwork.

Saljūq metalwork provides the art historian with a varied selection of decorative patterns covering a period of two centuries, but the system of decoration and style remains unified throughout. There are typical motifs that appear repeatedly in the designs of the metalwork of this period from the Eastern part of Iran, and these marked a consistent style and a localized workmanship. Therefore the stylistic analysis of these patterns and motifs and their generalization provides evidence with which we can attribute pieces to the Khurāsānian workshops. Fortunately, the existence of a good number of signed and dated specimens (icf. p ) are a guide which provides us with more clues for dating and localizing other objects.
The artist has often utilized the figural, vegetal and geometrical elements alongside the epigraphic inscriptions to decorate the surface of the metal objects. The field is always divided into different sections, each of which contains one or a combination of these decorative elements; one section contains epigraphic inscription; the principle themes, such as figural motifs or Zodiac signs usually appear in the medallions, linked by decorative bands; the frieze of running animals or birds fills other segments.

The general representation of the decorative ornamentation of the Iranian Saljuq metal objects of the later period is different from that of earlier times. In the early twelfth century pieces, the decorations were not crowded; in this case the motifs were conceived as an isolated group and put into individual frames. This was similar to the Sasanian heritage, in which an isolated stylized heraldic motif is placed by itself in a majestic style. Saljuq examples include the simple panel on the
early 12th Cent. ewer from Khurasan (Pl. 20) which depicts a seated prince on the throne, guarded by two quadrupeds on either side; on a jug, also from the early Khurasanian workshop, the same figure of an animal fills an entire medallion and is repeated several times in separate roundels (Pl. 35); the simple medallion on the crest of the bird statue depicting a heroic and majestic emblem (Pl. 74).

In contrary to this isolated decorative representation of the earlier period, the advanced style of the second half of the twelfth century tended towards an overall and dense decoration. In this case, the inscription, the series of figural motifs and the frieze of animals all appear in several regular, continuous bands, which cover all round the surface of the object; two examples are the Bucket of Harat of 559/1163 (Pl. 4) and the aquamanile, also from Harat of 603/1225 (Pl. 73). Even when the motifs appear in medallions, the decorative bands link them together into a continuous band, as for example on the late 12th Cent. bronze ewer in the Hermitage Museum (Pl. 22). The elements of this continuous presentation show a tendency
towards a greater informality with lavish decoration, naturalistic observation of courtly life and the new patrons of art who were amongst the common people, and for whom these objects were made (icf. p. ), for example the Bucket of Harat. This change in composition and representation seems also to be the result of a new interest in more extensive illustrative matter.

Very often when we examine the decoration of these pieces we find a preconceived plan in the arrangement of the scenes. They all have the same common theme, although the treatment of that theme is variable in different parts of the object. For example, hunting scenes and Zodiac signs were amongst the most common and favoured decorative elements in the various Saljūq metalwork of Khurāsānīan origin. Frequently a band (Pl. 22) or medallion (Pl. 22, 12, 4) or part (Pl. 5) of the object is devoted to these themes, but in some particular instances the artist has made an object with its entire surface devoted to one of these specific themes:
a- Astrological theme:

There are two examples from Khurāsān region which have a dominating astrological theme: The first is an early 12th Cent. bronze bucket in the Gemeentemuseum, the Hague, which has a bulbous shaped body (H. 19 cm; diam. 18 cm) with an applied ring foot, but the handle is missing (Pl. 7, 8). The main motif on this vessel is the twelve signs of the Zodiac depicted in the medallions, each of which are framed and connected by double lined bands forming small roundels between the individual units. The rest of the body is decorated with bands of interlaced Kūfic and Naskhī inscriptions with benedictory contents, and the appearance of the hare and deer amongst the animal frieze, with their ancient Solar aspect, enhance the theme of the decoration.

The second example of considerable importance is a footless bowl (H. 15 cm. diam. 26 cm) in the Tehran Archaeological Museum (Pl. 2. a,b). This piece is of a later date than the first example, and is most probably from the second half of the twelfth Cent.
Thorough study of this object shows that the figures of the Zodiac in the outside of the bowl are not isolated astrological elements, but the artist was also concerned with the whole cosmic aspect of the globular shape and other decorative elements such as the sun, moon and stars. In the same fashion as on the bucket, the twelve signs of the Zodiac are framed and connected to each other by a thin double band, which in a most unusual manner makes six small roundels and six diamond shape patterns in between each major unit. In addition to the rest of the patterns, this unique design could be interpreted as symbolic moon and star signs, as appeared with a different arrangement on the ewer in the Hermitage Museum (See Pl. 29). The unified astrological theme is completed by a band of interlaced benedictory Naskhi inscription, a frieze of animals such as hare and deer with Solar connection, and the appearance of a large six-rayed star at the centre of the bottom of the bowl.
b- Hunting theme:

This was another commonplace feature of the Saljuq metalwork of Eastern Iran. In this case, the medallions depict horsemen chasing the animal with bows, or carrying a bird of prey on his hand. Sometimes the band shows the acts of hunting in a series of scenes; animals are chasing each other or being attacked by falcons or hawkes. A frieze of chasing animals often appears against a background of vegetal scrolls and spirals, indicating outdoor activities. The best example is the mid-12th Cent. bronze inkwell in the Foroughi Collection, Tehran (Pl. 56-7 (icf. pp ) ) Another example is the vase in the British Museum of the late 12th Cent. Although generally its decorative arrangement is different from that of the earlier piece, its all-over decoration is the same theme (icf. p.59 ).

Here we shall present some of the most characteristic decorative elements of Iranian Saljuq metalwork of Eastern Iranian origin:-
Museum (Pl. 23); or the hunter may carry arrows (Pl. 56) or hunt with falcons (Pl. 57).

3- **Festive scenes:** These scenes of social entertainment and banqueting outdoors include:

a- playing musical instruments such as the harp, tambourines, and flutes (Pis. 24, 65, 73);
b- playing games as on the aquamanile (Pl. 73) and on the Bucket of Harāt (Pl. 4); c- drinking as it is depicted on the Bobrinski Bucket (Pl. 4), the inkwell in the Jazāyerī Collection, Tehran, (Pl. 55) and on the ewer in the Louvre Museum (Pl. 18);
d- dancing in the traditional manner with sticks as it is depicted on the Brobinski Bucket (Pl. 4).

A mixture of these scenes often appears on long panels such as those on the Brobinski Bucket (Pl. 4) and the aquamanile (Pl. 73). In other instances only one of these activities is depicted in a panel, such as the drinking scene on the inkwell in the Jazāyerī Collection (Pl. 55) and the seated musicians playing different instruments on the wash-basin in the Staatliche Museum, Berlin (Pl. 19).
Figural patterns in connection with human activities:

The medallions provide the best examples of mixed iconography. The scenes involving human activities all show different aspects in the life of a busy, rich and cosmopolitan community of the Iranian Saljūq era of the 12-13th Cent. and reflect the manners and occupations of the court. In general these scenes on the metalwork of this period fall into three groups:

1- **Courtly scenes:** This is a traditional theme, since it can be seen on a number of Sasanian and post-Sasanian silver dishes (icf. p. ), with throne scenes, often placed outdoors, and intimately linked with rural and hunting scenes (Pl. 12). Sometimes kings appear with his sovereign emblem (Pl. 20) or as a hero with heraldic signs (Pls. 4:, 74)

2- **Hunting scenes:** Sometimes medallions are found to contain gracefully poised warriors carrying shields and curved swords, like the one on the Bobrinski Bucket (Pl. 4); on the Bucket of Harāt (Pl. 5b), and on the bronze ewer in the Hermitage
Birds: Since the early ages and through the Islamic period, the bird has been used in decoration as a symbolic sun bird. The connection of the bird with "light" is well demonstrated by its application to various forms of lamps. Most of the Seljūq oil lamps are adorned with complete birds in round (Pls 38-39). The candlestick in the Walters Art Gallery shows complete birds and bird heads. Even some incense burners appear in the shape of whole birds, like the one from Khorāsān in the Tehran Arch. M., or the 12th Century incense burner in the Louvre M. The convention of applying animal parts to vessels was quite common during the Sasanian period and became also fixtures of metal objects on the Seljūq period e.g. they serve as handles or spouts of ewers and on covers for jugs.

The birds were integrated into the repertoire of motifs at this time and they were represented in various ways e.g. in rounds or in relief, either
singly or in rows. For example there are two 12th Cent. ewers, one in the Hermitage and another in the Berlin Staatliche M. which are decorated on the shoulder with a number of birds in the round in the same manner as the brass ewer at the British Museum. (Pls. 31-32).

The "opposed" or "confronted" birds were also a well established theme of the iconography of ancient Iran, e.g. birds on both sides of the tree of life. This did not disappear with the new artistic aesthetics of the Saljuq period and possibly the best example is of the birds on the Harât Bucket in the Hermitage (Pls 5-6). Another is the bronze mortar of Gurgân in Kashân M. (Pl. 67) The most unusual motif is found on the bronze casket from Hamadân in the Tehran Arch. M. which shows two pairs of swans with interlaced necks in medallions of a most beautiful and elegant design. (Pl. 64)

Many different kinds of birds appear in
Saljuq metalwork, for example, falcons, swans, geese and ducks. The falcon is found sometimes sitting on the hand of a mounted hunter as in the hunting scene on (Pl.57) the bronze ink-well from Khurāsān in the Broughi collection. The swan has retained its grand Sasanian manner, and is always drawn with dignity as in the silver sālyer of 459/1066 (Fig.61c). The harmony of movement and the delicacy of lines impart to the whole design a poetic quality that heightens rather than weakens the intensity of the idea; the best example is the one on the engraved brass Bucket of the Hermitage M.(Pl.10).

But amongst all these bird motifs there is a figure of a kind of bird, most probably a duck which can be regarded as a most characteristic and typical of the birds appearing on 12-13 th Cent. Iranian Saljuq metal objects. This bird is always shown in profile, usually from the left, standing on both legs with its head and its stylised tail both raised and turned back. Here we shall mention a few examples of Iranian Saljuq metalworks on which this bird has appeared: 1- on the Bucket from Harāt in the Hermitage M. (Pl.4); 2- on the pencase in the Hermitage M. (Pl.68); 3- on the inkwell in the Jazayerī collection (Pl.54).
Mystical and Imaginary animals: Sometimes certain decorative elements were brought into play by way of some mental association. In the society where Šūfism was widespread, the precise meaning of a visual symbol must depend on an exact descriptive reference from contemporary literature. Sometimes many of the individual decorative features applied to the Saljūq vessels are traditional, but these were probably not as forceful in conveying their message. The symbols deteriorated into mere decorations with only vague hints of the original content; for example the implications for fertility of the animal "master" and the solar significance of disc ibex, cock, duck, hare and lions. For instance the Luristān compositions are almost always labeled as the "master of animals", i.e. the highly stylized hero between two animals, and this composition appeared again on the handle of the oil lamp of the late 12th Cent. in the Tehran Arch.M. showing a man between two horses (Pl.40).

The iconographic significance of the fantastic animals such as harpies and especially of the sphinxes are still rather obscure, particularly
the sudden appearance of crowned sphinxes in the 12th Cent;
The origin of sphinxes and quadrupeds:

A survey of the metal objects of Iranian art from earlier times, as far back as the Achaemenian period indicates a revival of a more ancient heritage of these fantastic animals. We find these sphinxes and quadrupeds, whose cosmological significance as symbol of supernatural guardians for kings is deeply rooted in the Iranian traditions. The ancient representation of thrones supported or guarded by winged animals, which seem to have assumed the function of the sphinxes, continue to be common motifs in Islamic art. There are some examples from 12-13 Cent in which an enthroned king is supported by quadrupeds in which winged creatures are shown on the sides. The best example is the 12th Cent. bronze ewer from Khurāsān in the Tehran Arch. Museum. On this ewer the winged animal appears on either side of the double ogee medallion, with a seated crowned prince at the middle (Pl. 20). They sometimes appear on the base of the
throne, for example on the 13th-Cent. brass salver from Syria in the British Museum. (3)

From the 12-13th Cent., scenes comprising human-headed quadrupeds or sphinxes, associated with an enthroned prince or with scenes of royal pastimes are also displayed in heraldic pairs on metalwork as well as on ceramics of this period. For example, two sphinxes are shown in front of an enthroned prince on the base of the candlestick from North Mesopotamia in the Staatliche Museum, Berlin, No. I-3571. It also appears as a "heraldic guardian" in the hunting scene on the brass ewer from Khurásún in the Boston Museum of Fine Art. (6)

Some examples of the appearance of the sphinxes in Saljūq metalwork: The most common appearance of sphinxes is a wheel of four sphinxes with their wing tips interlaced like the one on the interior of the "Wade Cup", or in the later period, on a tray bearing the name of Badr al-Dīn Lulu' of Mosul (1233-59) in the Victoria and Albert Museum. However they appear without interlaced wingtips on the 12th Cent. mirror in the
Tehran Arch. Museum (Pl.61), where these animals are revolving clockwise around a central point. A combination of three as a circular motif appears on the top of an inkwell made by Nāṣir b. Asad Naishābūrī. Two sphinxes in relief are placed in opposite directions on the few mirrors of the early 12th Cent.; in this case their wings are interlaced making half acanthus leaves (Pls. 62–63). It also occurred in the medallions on the body of the 13th Cent. brass fluted ewer from Eastern Iran in the Cleveland Museum of Art, No. 45.27.

Animal whorls appear in Saljūq metalwork of the 12th Cent. As a revolving circular motif, they were originally probably a solar symbol and not mere decoration. It is also possible that the four animals in this solar symbol represent the cycle of the four seasons with the animals being joined together to form the year. Representations of the seasons in a cosmic setting are of course a traditional motif.
The origin of human-headed birds or harpies:

After a few centuries absence, human-headed birds reappeared in Iranian art, replacing sphinxes later in the 12-13 Cent. The apparently complete absence of harpies in the Sasanian representations leads us to deduce that their appearance in Iranian Saljūq are indicates a revival of more ancient concepts.\(^{13}\) The Lūristān bronzes suggest that in those early times harpies were common.\(^{14}\) Evidence shows that the human-headed birds motifs were reintroduced to Iranian art during the early 12th Cent through the westward movement of the Turkish people. The existance of harpies and their appearance in early Islamic art in Central Asia supports this suggestion; human-headed birds were apparently associated with the soul and life after death in Soghdian art.\(^{15}\) They also appeared on the buildings of Central Asia. The design of pairs of harpies occurs on the wall painting of the 10th Cent. temple in Turkistan\(^{16}\) and also as architectural ornaments made of clay in 8th Cent. Samarkand.\(^{17}\) Other examples are found on several metal objects from early Islamic art in Central Asia in the Farghana Museum.\(^{18}\)
All these human-headed birds with their crowned heads and voluted tips of their wings are suggested to be of ancient Iranian decorative elements which were preserved in Central Asia.

In the case of human beings associated with cosmology, the Saljūq artists often used the human-headed birds instead of human beings; as it often occurred in the Zodiac signs, two harpies represent the Gemini; such as the Zodiac sign on the bronze bucket in the British Museum, or on the bronze bucket in the Walters Art Gallery, or on the bronze dish at the Victoria and Albert Museum.

The pairs of harpies also appear in connection with the solar setting; on the bucket of Harât a pair of harpies and two birds appear around the disc of the sun (Pl.6). There are a few instances in which a pair of harpies appear as a double-bodied harpie, as depicted on the globular brass bowl from Kirman in which crowned harpies neck is decorated with a granulated necklace. Crowned harpies in round are common Iranian Saljūq decorative elements on incense burners (Pl.45), oil lamps, and stands (Pl.41).

It has also appeared three times on the body of the bucket in the Hermitage Museum (Pl.10).
Astrological themes:

What distinguishes the later scientific designs from ancient Iranian astrological designs is the notion of mathematical proof. During the Saljuq period, the development of observational science and mathematical astronomy helped the progress of astrology,\(^{(24)}\) which was furthered by mathematicians and philosophers like 'Umar Khayyam.

From the 12th Cent. the signs of the Zodiac are found on Saljuq metalwork; these were used primarily as decorative motifs but retained some magical and prophylactic undertones. The extant examples reflect two different astrological systems. The seven planets were most commonly shown in their "domicilia", the twelve Zodiac signs are set together in horizontal bands (Pl. 12). The sun and moon were assigned one Zodiac sign each, and the planets, Mercury, Venus, Mars, Jupiter and Saturn controlled two signs each, one male and another female.\(^{(25)}\)
Generally speaking, the figures follow the iconographic tradition of the "mixed" representation, depicting the Zodiac sign together with its planetary Lord. For example, Venus is the planetary lord of Libra and is shown as a bird standing under a set of scales (Pl.8,24). Virgo is represented by Mercury, a crowned man sitting cross-legged between two "trefoils", which represent ears of corn (Pl.2b).

There are also some geometrical patterns characteristic of Khurasanian origin, such as:

1- Stylized vase with ornamental vegetation:

This is a tri-partite vase-shape motif which occurs on several metal objects of the 12th Cent. from the workshops of Eastern Iran. The vase has an ovoid centre-piece with triangular neck and foot joined to it. While the shape of the body remains almost the same in every instance, but the ornamental vegetation is changeable; for instance, on the 12th Cent. tray in the S.C. Welch Collection, Cambridge, two hanging sprays appear on either side of the vase; three flower sprays appear inside the vase on the ewer.
signed by 'Abd al-Razzāq al-Naishābūrī, in the Staatliche Museum, Berlin. But the most perfect and complete form of this motif is depicted on the early 12th Cent. inkwell in the Jazāyerī Collection, Tehran (Pl. 52, 54), in which the flower sprays from the top of the vase frame a figure of a bird. Sometimes, however, the vase is depicted without any other additional design, as can be seen around the rim of the Bucket of Harāt, signed by Muḥammad b. Nāṣīr b. Muḥammad al-Harawi (Pl. 5).

2- **Plaited Patterns:** Another characteristic design of Iranian Saljūq metalwork of North-Eastern centres is the decorative plaited border. This regularly designed pattern occurs in the same manner on different parts of the metal objects throughout the 12-13 Cent. This pattern is particularly interesting because of its regular appearance on the objects used as water containers, such as water flasks, buckets and ewers; this may be related to the ancient symbolic water design.

a- Waterflasks: this pattern appears around the central zone on the body of the copper and silver inlaid
bronze flask in the British Museum, of Eastern Iranian origin, late 12th Cent date. (29)

b- Buckets: double plaited pattern appears around the bottom of a brass bucket in the Hermitage Museum (Pl. 10), and also on the base of another bucket found in Gurgan, now in the Tehran Archaeological Museum (Pl. 9).

c- Ewers: this pattern is depicted on the base and around the neck of the twelve-sided ewer in the Hermitage Museum (Pl. 31, cf. p. ), and decorates the base of a fluted ewer in the Staatliche Museum, Berlin (Pl. 32, cf. p. ).

This plaited pattern also appears as two bands above and below the body, acting as a border, on the bronze six-legged wash-basin in the Staatliche Museum (Pl. 16), which is an early 12th Cent piece from the Khurāsān workshop. It also decorates round the lower part of a 12th Cent. bronze mortar of Khurāsānian origin, in the Staatliche Museum, Berlin (Pl. 69).

3- Tassel-like border: This is another decorative border found on Saljuq metalwork, which comprises a band with several radiating stalks, each carrying a bud-shaped
or three-petalled flower. It occurs on several objects of this period, such as: the lower part of the Brobinski Bucket (Pl. 4) and on the bucket in the Gemeentemuseum, The Hague (Pls. 7, 8); and also on the bottom of the Tiflis ewer and on the "Wade Cup" in the Cleveland Museum. (30)

4- **Knot-forms:** These knots are a feature of 12-13th Cent. Khurasanian metalwork, and may have mystic implications; the late Professor Rice has called them "luck-knots." (31) These knots were already a feature of Naishápūrī pottery. (32) There are several examples of its appearance such as:

- two signed and dated metal objects from Harāt, i.e. the Bucket of Harāt in the Hermitage Museum (Pl. 5);
- on the body of the aquamanile (cow), which was signed by its artist from Harat and dated 603/1225 (Pl. 73);
- and also appears on the Tiflis ewer, dated 577/1182.

Also on the curved rim of the shoulder of the late 12th Cent. twelve-sided ewer in the Hermitage Museum (Pl. 25); it is also formed by the interlaced wings of four sphinxes on the "Wade Cup" in the Cleveland Museum. (33)
The problem of composition was better understood in the later period of the 12th Cent, when the artists created a great variety of medallions, with bands of different widths and patterns, often of neutral character, framing and bordering the principle motifs. Sometimes even the frieze of animals acts as a decorative band separating the major units (Pl. 9), rather than itself appearing as the pictorial panels. In this case, they are not connected with the other theme on the surface of the object (Pls. 18, 64), and they appear comparatively small and of only one or two species. But they play an especially important role when they are the chasing animals in hunting scenes, in which case a variety of species appears, such as trained dogs, felines, hares, deers, and birds of prey, and there is more space for them to occupy against a background of vegetal scrolls.

Vegetation is well developed in the decoration of Khurāsānian metalwork of this period. The vegetal scrolls sprout out of the bases of panels, medallions, and even the letters in the inscription (Pl. 55) as if from the ground. They appear in a "natural" way, indicating landscapes, especially in the outdoor (Pl. 10).
scenes, such as banqueting (Pl. 18) and hunting panels (Pl. 56). Vegetation also appears as an "unnatural" motif wherever there is a space to fill, and this is essentially "decorative vegetation" (Pl. 32). This especially occurred towards the second half of the twelfth century, when the overall pattern and dense background came into fashion. In this case, the vegetal spirals cover the whole surface of the background and fill the gaps between the main motifs (Pl. 7, 34).

The qualities of ornamentation of Saljūq metalware could be classified as follows:

1. Although the Iranian Saljūq designers preferred the simplicity and tranquil decorum yet they knew the formula had to turn sometimes to excitement, complexity and sophistication (and they never lost their hold on any of these). The designer controls the complex of motifs and patterns into one significant pattern out of which grows a new entity with its own individuality and its own emotional values.
2. This also occurs to the geometrical designs which despite their own multiplicity and complexity correspond to mathematical thinking. Their logical relationships and aesthetic selectivity is satisfying not only to the eyes but to the mind with their beauty and emotion.

3. Realism and naturalism is to the Saljuq metalworker something superficial and individual. Therefore he generally preferred an idealistic style which had the quality of timelessness and universality.

4. Although the Iranian Saljuq artists were romantic and Islamic ritual required deep quiet yet vitality was a fundamental conception of their art and there was no representation of tragedy nor sign of depression in the motifs of the metalwork.

5. It was not only the frieze of seated musicians and the festive scenes but also other ornamentation of Saljuq metalwork which has a musical effect on the observer. Even there is a rhythmic harmony between the interplay of the letters in the inscription panels with their vegetal spirals and scrolls background.
FOOTNOTES TO CHAPTER IV

1. For more details see Baer, E., *Sphinxes and Harpies in Medieval Islamic Art*, (1965).


8. ibid. p. 345.

vol. 6-7, pp. 123, Fig. 3, (1946).

10- See Baer, E. op. cit. Fig. 24.
13- Baer, E., for more details see op. cit.
14- For further details see: Cleveland Museum of Art Bulletin, vol. 47, No. 10, (Dec., 1960) p. 227, Fig. 53.

Here we should also refer to the early conception of Greek sirens: before the last centuries of the Pagan period and during the Middle Ages, were birds with human heads of either sex (in the archaic period they were often bearded and therefore male). They were musicians and essentially funerary, and accompanied the soul of the dead into the other world. Sirens were often represented on the pediments of funerary stele. It appeared on Greek Stamnos from 480 B.C. in the British Museum.


20 - Baer E. *op.cit.* p. 73.


22 - This bowl has been recently excavated by G. Fehevary.

23 - See: example in the Art Institute, Chicago, No. B 1943/26-1148; Baer E. *op.cit.* Fig. 27.


25 - For more detail see Ettinghausen R. *"The Wade Cup"*, *A.I.* vol. II, p. 204.

26 - Rice D. *The Wade Cup in the Cleveland Museum*, p. 17.
27- Ettinghausen, R., "The "Wade Cup" in the Cleveland Museum of Art, its origin and decorations", A.O. vol. II, 1957, p. 343. Fig. 344-a-b.

28- Sarre, Erzeugnisse islamischer Kunst, No. 14 (for a general view).

29- Barrett, Islamic metalwork in the British Museum, Pl. 9.

30- Ettinghausen, op. cit. p. 363; Rice, D.S., The Wade Cup in the Cleveland Museum of Art, p.11.

31- Rice, op. cit. p. 11.

32- Ettinghausen, op. cit. p. 360.

33- Rice, op. cit. p. 11, Fig. 6.
CHAPTER V

THE IMPORTANT ROLE OF CALLIGRAPHY

IN SALJUQ METALWORK

Calligraphy is perhaps the most legitimate art of Islam and has played a dominant role in Saljuq life.

The Iranians initiated a calligraphy in which to write the inspired words of the Prophet as set down in the Qur'an. In the early stages Arabic script was employed for purely religious reasons. Later, during the Saljuq dynasty, it continued to be used for its decorative qualities and every kind of artistic craft was adorned with this script.

The Iranian Saljuq artists utilized calligraphy for various purposes. Sometimes the motive was religious, as in the inscription on a religious building on which the builders wrote the Qur'anic script. Sometimes, as in the inscriptions usually written in bands around metal vessels or containers, it is to call down blessings on the vessel's owner or on the specific purpose for which the vessel is used. Sometimes the inscription
is designed to protect the vessel itself from harm.

Often these inscriptions dealing with religious contain signatures and dedications (ṣūrā & vā) which or historical subjects help to identify the maker of the object, the name and quality of the person to whom it was dedicated and the date on which it was made. The script is also used to strengthen the main motifs and lines of the vessel in a particularly effective fashion, tracing, continuing and enhancing the pattern of the decorated surface with its increasingly complex ornamentation.

Qur'ānic calligraphy during this time has controlling influence on other arts, providing indispensable discipline as well as concrete ideals for painters and designers.

The invention of a calligraphic alphabet must rank as one of the finest creations of the aesthetic impulses. The study of the principle decorative alphabets of the Saljuq metalworks show how their designers developed a handsome script enriched with novel ornamental details.
The Saljuq artists had soon recognized how well the Kufic script lent itself to decorative purposes. In this the shafts of the individual letters are attached to a horizontal base-line so it naturally assumes the design of an ornamental border which can be easily adapted to whatever surface is to be decorated.

But the calligraphy of the Saljuq metalworker has an importance greater than that of its role in Islamic calligraphic art in general, its high aesthetic quality and its specific characteristics which help the archeologist to date a particular object even when it is carrying neither the name of its makers, owner nor the person to whom it may have been dedicated, so clarifying the history of the epoch. The greater importance of the calligraphy used by the Saljuq metalworker is that it provides a possibility of investigating those Saljuq manuscripts which have been destroyed but of whose one-time existence there is considerable evidence, and further it provides evidence for the high qualities of the elaborated contemporary manuscripts.
Calligraphy was highly valued and assiduously patronised amongst the upper classes as a mark of culture. The Saljuq sultans lavished patronage on the Iranian calligraphers. Some sultans indeed went further and themselves practiced the art. Tugrül II spent one thousand Maghribi dinars on the illumination of each of the thirty volumes of a Qur'an he had himself copied. Ravandi spent ten years studying calligraphy. He composed a book on the principles of calligraphy and included a chapter on this subject in his book "History" of the Saljuqs.

Numerous circumstances limit the hope of examining the lost Saljuq manuscripts, not the least of course being the fact of their loss either because the paper itself was a fragile easily destructible material or because the capital cities along with their libraries have been laid waste. During the thirteenth century for instance all the rich libraries of Khurasan and
and elsewhere were burned down in the Mongol invasion
and much of the work of Iranian Saljuq painters and
calligraphers perished in the fire. However, a few manuscripts of
this period have survived, such as "Urghah and 'Askāh" (2).

The Saljuq metalwork that survived provides
excellent examples of the vanished work of those
calligraphers and illuminators. Throughout the Saljuq
period each craft was influenced by the others and
there are many interesting instances of this close
relationship between them. Certain motifs and patterns
are common to both manuscripts and metalwork. Despite
the difference in technique, the method of calligraphy,
its development and variations were almost identical.

For example, braided patterns in simple and
complicated forms occur in much of the pottery and
metalwork as well as in the Qur'an. Some patterns,
most probably inaugurated by the illuminators, such
as the pointed ovoid that in the Qur'an indicates
the fifth verse, appear on many metal vessels as well
occasionally on faience.

Furthermore the metalworkers, despite the greater
difficulty of their medium, had a more free hand than the Qur'anic calligraphers in the matter of working the plain Arabic inscriptions into more decorative patterns.

Although by now the art of book illumination and calligraphy, especially in the Qur'an, had developed its own intrinsically Iranian idiom - as shown in the angular Kufi scripts and the sophisticated floral decoration in reddish or yellow gold applied to the commonly used paper - the shafts ending in human heads or intertwined with animal forms which is the predominant characteristic of the Saljuq metalwork calligrapher this never occurs in the manuscripts. The majority of the manuscripts were Qur'anic and writing for the Qur'an may not develop any playful decoration, Metalwork, on the other hand, would often use historical inscription that could be so ornamented.

At this time the Iranian Saljuq artists found in calligraphy the most satisfactory means to express their conception of spiritual beauty by way of pure form. All the religious and artistic ideals of the
The study of the characteristics and styles of the calligraphy used on Saljuq metalwork is an aid to research on the craft as a whole. But to get full value from this each study should be approached from two separate points of view. On the one hand the inscriptions with the characters used in their composition should be understood and appreciated as decorative constructions. In this respect calligraphy constitutes one especial phase of ornamentation. On the other hand because of its precise history and its exact and sensitive reflections of changes in taste and style it may serve as a useful guide to dating and even to attribution. Furthermore the analysis of this will reveal certain typical characteristics of Iranian calligraphy of the time as well as providing new factors to enable us to establish a more accurate chronology of the whole period.

Our first concern must be to find a basis of
reliable date which may guide us through the maze of ornamental epigraphic art. Naturally we will turn to the inscriptions on those objects in Iran that have already been dated.

Two principal scripts are used in Saljuq metalwork; the angular Kufic and the cursive Naskhi. The Kufic, the earlier form, believed to have been invented at Kufa, South of Baghdad, accentuates the vertical strokes of the characters.

The calligraphic components, vegetal and geometric motifs alike, became of great importance in Saljuq metalwork decoration, particularly as a purely decorative element. And what decorative element could be more self-sufficient than Arabic inscription? Furthermore as the Iranian Saljuq artists always preferred the cursive to the straight form they integrated the simple angular Kufic into every sort of decorative scheme. Thus the calligraphic ornamentation was extended into an increasing range of richly plaited or floriated Kufic alphabets.
We may distinguish at least five different varieties of Kufic scripts existing in the various centres of metalwork in Iran at this time:

(a) The oldest type is the simple Kufic on plain unadorned background. According to the description of this variety given by S. Flury in (3) a purely ornamental border is added to the upper part of the band of writing; script and ornament thus forming two horizontal zones clearly separated from each other. (Figs. 19, 65). It is actually not a question of a new kind of script but of a distinct decoration of the frame only.

(b) The Foliated Kufic. In this script foliated motifs grow from the letters consisting of half-palmettes and two or three lobed leaves (Figs. 61, 62). Sometimes these motifs appear from the upper edge of the band of script thus giving the letters a more decorative character.
(c) The floriated Kufic shows the same decoration with additional floral motifs, tendrils and scrolls growing from the terminations or even from the medial forms of the letters (pls. 34, 50). These tendrils are of course to be distinguished from those growing from the upper edge of the band of writing or forming the floral background of the inscription. The development of fine scrolls for the terminae of the Kufic letters constitutes one of the earliest recognitions of the independent beauty of the Kufic letters and an example of one of the first exploitations of its decorative possibilities on Saljuq metalwork.

(d) The interlaced or plaited Kufic is the most striking calligraphic variety created for it introduced so many decorative elements into the script that its original character is greatly changed. The vertical shafts are now
enriched by little loops and all sorts of plaited motifs. (Pls. 4, 5, 25, 31).

(e) The bordered Kufic offers another proof of the decorative tendency prevailing in epigraphy of the Iranian Saljuq metalwork, mostly in the East. This is a kind of writing in which a purely ornamental border is added to the upper part of the band, script and ornament thus forming two horizontal zones clearly separated from each other (see Pl. 31).

The evolution of foliated and floriated Kufic and cursive Naskhi in metalwork during the Saljuq period gives a new example of the activity of this individual creative power that would willingly accept and develop inscriptions both from other countries and from earlier times.

A special form of apex consisting of a loop (٣٦٧٧٢١) on the right side of the letter which was common until the early fifth century developed into the three-leafed
This simple ornament was transformed into an artistic half-palmette and thence the genuine floriated Kufic began by the second half of the Fifth century. Now not only the shafts of the alif and lam but also the terminations of the other letters show forms lobed in the same way (Pls. 34, 50, 61, 62):

Perhaps even more important than the half-palmette is the partition of the tops of the alif and lam in the form of a three-lobed palmette (Fig. 6) which had a decisive influence on the development of the floriated Kufic (Pl. 66):

By the 6th c. The barb on the right side of the alif and lam had possibly already developed into a loop in the same way as that upon the left side in a Tiraz inscription in the Textile Museum in Washington and again on a textile in the Ackerman-Pope collection. As well as the inscription of the Mihrab of the mosque in Būzān dated 528/1134 (Pls. 5, 19, 31, 65).
It is now necessary to discuss the origin of the "floriated Kūfic" which was believed to have originated first in North Africa (Tunisia and Egypt) but there is much evidence to disprove this theory.

The origin of the "floriated Kūfic" was discussed by J.G. Chro Adler and Marcel and later by W.G. Marçais. It was said that angular floriated character which was known as "Carnation" pointed to the Fatimid dynasty. Furthermore they said that it appeared for the first time in Tunisia in 341 H/963 and was then transferred to Egypt by the Fatimids. But A. Grohmann believes that Egypt was the place where the origins of "floriated Kūfic" could be found.

However N. Von Berchem rejects these views. According to his theory this "floriated Kūfic" moved from the East to Egypt. He considered the famous Stela of Tashkand, dated 230/844, to be the oldest example known of this type of script which was later to manifest itself so energetically in the Fatimid.
He concluded that this style passed through Iran to the Western Islamic lands.\(^{(19)}\)

J. Strzygowski has agreed with this view and despite the objections of J. Von Karabacek\(^{(21)}\) and Hertzfeld,\(^{(22)}\) presents evidence that causes us to agree with the new theory of Van Berchem.

In the first place there is evidence which has so far never been considered that there was a relationship between the Iranian Shi'a Isma'ili and the Fāṭimīd Court which had opened up as early as the fourth century. Several prominent Isma'ili missionaries during the Saljuq times travelled to Egypt and stayed in the Fāṭimīd Court, for example ʿHasan ʿl-Sabbāḥ (icf. p. ) and Nāṣir ʿKhosraw\(^{(23)}\) who travelled to the Fāṭimīd Court in 425/1047. It is also possible that artisans visited Egypt at this time. Early Saljuq metalwork shows this style flourishing in the early fifth century in Iran.

**Naskhī:**

Epigraphic data show that in the East after Kūfīc had reached its height it gave way to Naskhī. From the late eleventh century Naskhī gradually
replaced Kūfic though the latter never entirely disappeared and is still being used, as it was in the 11th Cent., alongside the rounded Naskhī. As time went on however it was Naskhī that became the more usual script for metalwork. (24)

There are three late 12th Cent. ewers (Pls. 25, 28, 31) in the Hermitage Museum from Khurāsān and most probably from the same workshop (icf. pp. ). They clearly show how Naskhī became predominant over Kūfic inscription towards the end of the 12th Cent. The decorations on these ewers have been executed in the same fashion and have a similar arrangement of the bands of benedictory inscription on the upper and lower part of the body, around the base, and on the neck, which in two cases (Pls. 25, 31) alternate between Naskhī and Kūfic. But the third piece, which was probably made later than those two, all the bands appear in Naskhī (Pl. 28, 30).

Although Iranian Saljūq metalworkers had used Naskhī for some time, it was only later that they appreciated its immense flexibility and devised innumerable variations of the epigraphic bands and new ways to embellish it.

But as the craft developed they realized how the cursive
Naskhi script was particularly suited to metalwork, enhancing letter endings and lending itself perfectly to the intertwining patterns of human and animal heads.

Kufic and Naskhi spring from the same roots and were never wholly free from a reciprocal influence. Kufic developed first as a monumental script and influenced the development of the Naskhi in many respects which is especially obvious in the inscriptions on the Saljuq metalwork.

It should be noted that the metalworkers while employing many different kinds of ornament available to them made no definite distinctions between Quranic quotations, signatures and dates.

Towards the end of the 12th century a much greater development of Naskhi was initiated in Iranian Saljuq metalwork. This same development occurred also on the luster-painted pottery of Kashan and Ray. As far as possible the designers made an effort to adapt to Naskhi script all the decorative devices that had been developed in the Kufic. The influence of inter-
-laced Kufic is especially apparent in the Naskhi script. For example the inscription on the Bobrinski bucket could be taken as evidence (see pl. 4). Distinctive features are the crossing of the letters, connections between the ends of one letter and the shaft of the next - e.g. the Naskhi inscript "baraka li-Sahibih"
(on the bronze aquamanile made in 625/1225 now in the Hermitage Museum (pl. 73)).

All the examples show how strong was the impulse to make the letters decorative. In addition to these uses a mixture of styles in the characters and a combination of different types in one inscription are both decorative and historically important. Until the twelfth century the Kufic and Naskhi scripts appear side by side on Saljuq metalware and later in the late 12th century it was gradually replaced by Naskhi alone. This fashion was first established in Iran and then spread to the other parts of the Islamic world. It was also current in the monumental inscripts and in manuscripts but unfortunately the Iranian Qur'an of the 11th century has
not yet been fully studied so that it is not easy to say what relation the script or scripts used here bear to those employed in secular manuscripts but so far as we know the Qur'\textsuperscript{a}n has sometimes the text in N\textsuperscript{a}skh\textsuperscript{i} with the title in K\textsuperscript{u}fic.

The best examples of the two scripts being used together are on the two \textit{\textbf{b}}\textit{\textbf{u}}\textit{\textbf{k}}\textit{\textbf{a}}\textit{\textbf{k}}\textit{\textbf{e}}\textit{\textbf{k}}, made in Har\textit{\textbf{a}}\textit{\textbf{t}} in the mid-twelfth century, both of which are now in the Hermitage Museum. (Pls. 4, 5). On the first of these, the Bobrinski \textit{\textbf{b}}\textit{\textbf{u}}\textit{\textbf{k}}\textit{\textbf{e}}\textit{\textbf{k}}, dated :559/1163, interlaced K\textsuperscript{u}fic and two bands of N\textsuperscript{a}skh\textsuperscript{i} are used. Even more interesting is the very unusual decoration of the tall uprights of the N\textsuperscript{a}skh\textsuperscript{i} letters; in some instances they have engraved human faces, half-figures are now used for the higher letters while animal motifs adorn the smaller ones. This figured N\textsuperscript{a}skh\textsuperscript{i} is exceptionally beautiful when the top of each letter terminates in a pair of arms imitating a half-palmette (Al\textsuperscript{i}f-l\textsuperscript{a}m-fa-\textsuperscript{a}t\textsuperscript{a}) taking the place of palmette K\textsuperscript{u}fic (pl. 22, 25). This fashion continued but has never been used to better effect than on this \textit{\textbf{b}}\textit{\textbf{u}}\textit{\textbf{k}}\textit{\textbf{e}}\textit{\textbf{k}}. 
On the other 12th Cent. bucket, also from Harât, signed by Muḥammad b. Nāṣir b. Muḥammad al-Harawī, both Kūfic and Naskhī scripts are combined. The text on the vertical flutes is in Kūfic and that on the neck is in Naskhī (Pl. 5).

In Saljūq metalwork the development of rhythmic effects like these are found in Kūfic inscriptions: For example in the extension of the groups of letters or insertion of curved or interlaced motifs or by a shift or slight inclination of the vertical shafts, none of which is possible in the rounded scripts. Although no definite rule can be formulated it is in general true that the decorative development of Naskhī depends less on the elaboration of the characters than on the ornamentation of the background. The spiral and undulating vines and separate ornaments were all employed to accentuate the rhythm of the Naskhī scripts on Saljūq metalwork almost in every object (Pls. 2, 30, 31).

The undulating vines were already an important decorative feature in Iranian Saljūq metalwork as early as the 11th Cent. These had been used for
Kufic inscription and later for Naskhi friezes. They presented especially favourable possibilities to the crafts of metalwork and stucco for they could be rendered with single or double undulating stems and much variety of spacing and in scale. As many as three or sometimes more regular turns can be found in some of these spiral designs, for example, the Brass Tray (see Pl. 11a-b). On some vessels this multiplication of spiral twists almost destroys the plant-like character of the pattern (Pl. 3, 13). In Kufic inscription bands of these vines are often confined to the upper part so that they run along the tops of the lower letters (Pl. 25, 28). This division appears also in the inscription band of the Mosque of Uzgand (547/1152). It is however less usual in Naskhi script.

Double-stemmed vines carry symmetrical and asymmetrical foliation and palmettes or acanthus sometimes develop directly out of the letters in Saljūq metalwork (Pls. 9, 25, 33, 55).
FOOTNOTES TO CHAPTER V.

1- Ṣāvandī, Rāḥat as-Ṣudūr, Muhammad Iqbal (Ed) Leyden, 1921, pp. 38-41.


3- Flury B.S., "Ornamental Kufic Inscriptions on Pottery", Survey, vol. 4, p. 1743-4


5- Flury, op.cit. p. 1744.

6- Grohmann, op.cit. p. 184.

7- For the full description of the places of origin of Kufic, see van Berchem M., "Inscriptions Arabes de Syrie", O.L.Z., vol. 14, (Heidelberg, 1911).

8- Grohmann, op.cit. p. 194.

9- Ibid. p. 195.
11- Ackerman, "The Textile Arts, Textiles of the Islamic Periods", Survey, vol. 3, P. 2011, Fig. 646,
12- Harari, Survey, p. 2731, Pl. 311/b.
Grohmann, op.cit. p. 185, Pl. I, Fig. 2;
17- Grohmann, op.cit. p. 185.
18- Karabacek, Beiträge zur Geschichte der Mazjaditen, p. 53.
19- Grohmann, op.cit. p. 185.


23- Naṣir Khosraw has extensively discussed his travels to Egypt and his visit to the Fatimid Court, Naṣir Khosraw Traveller, (in Farsi) Ed. M. Dābīr Sīyāqī, (Tehran 1953).


25- Kratchovskaya, op.cit. p. 1771.

CHAPTER VI

THE EVALUATION AND DEVELOPMENT OF KUFIC AND NASHKII INSCRIPTIONS IN SALJUQ METALWORK.

Iranian Saljuq metalworkers have contributed much more to the development of calligraphy than has perhaps so far been admitted.

Here we shall bring forward the examples that show the development of the Kufic and Naskhi scripts which occur in Iranian Saljuq metalwork.

The calligraphic repertoire had reached almost its maximum expansion by the 12th century. Before this there had been variations and enrichments but no novel principle in decorative script emerged until the 12th century. The scripts which had appeared were Palmette Kufic or a Kufic that was trefoiled. These by now were being used in their more elaborate forms, particularly in the Eastern provinces or Khurasan.

This style has been called "figured" and or "animated" "anthropomorphic". The letter heads are given either human or animal faces or as a further development even the letters as a whole took human and animal forms.
The types of writing so far mentioned were used in all branches of Saljuq art but the latter style, the "animated script", is peculiar to metalwork, occurring neither in Saljuq manuscripts, monumental epigraphy nor any other applied art of the period.

**Animated inscriptions:**

The phenomenon of the "animated script" as such and its zoomorphic aspect in particular begins in the early 11th Cent. The first appearance of it that has so far been noted is on a silver and copper inlaid brass tray, belonging to the Heeramaneck Gallery in New York. On this the letters are fused into the heads of real and fanciful animals and birds.

The examples of Animated" and "human-headed" scripts are as now only known on metalwork — although there is one exceptional piece of pottery of the early 11th Cent. from Nishāpūr in the Tehran Arch.M. on which the lettering does appear to be endowed with the heads of birds.

The "animated" type occurs only in Naskhī but of
the "human-headed" script both Naskhī and Kūfic varieties are known: "human-headed" Naskhī of a rudimentary kind appears in the upper band of the "Brobinski Bucket" of 559/1163 (Pl. 4); and another later example is on a pen-case, dated 607/1210 (icf. p. ) made in Khurāsān and now in the Freer Gallery of Art. The fully developed example of interlaced "human-headed" Kūfic writing decorates the late 12th Cent. brass fluted ewer in the British Museum. It seems that both "human-headed" Kūfic and "human-headed" Naskhī were used in the 12th Cent. but that the former was gradually neglected during the course of the thirteenth. The fashion of using "animated" writing for the decoration of metal objects seems to have lasted only into the Mamlūk period.

These "animated" and "human-headed" scripts like so many epigraphic fashions originated in Eastern Iran and spread from there Westwards through Mesopotamia and the Caucasus to Syria.
The Late Professor D.S. Rice has distinguished three varieties of this special style of writing and has given each an appropriate name:

1- **"Animated Naskhi"**: Rice designates the "animated Naskhi" as the tall letters formed of human beings engaged in various activities, holding beakers and bottles, warriors brandishing swords and shields etcetera while some or all of the lower letters are composed of animal parts. There are two most ingenious and appealing examples of this group, one on the Bobrinski II. ... of 559/1163 (Pl. 4) and the other on the "Wade Cup" in the Cleveland Museum of Art. (5)

But perhaps the most well developed and elaborated form of this mixed animated Naskhi is on the brass, fluted vase that was made in the late 12th Cent., in the British Museum, (6) where the band of this type of inscription decorates round the neck. The tall letters are terminated in human heads, with the one exception of the letters lām and ālīf in the word "salāma" which are formed into a dragon
in a similar fashion to its appearance on the Bobrinski Bucket (Pl. 4). The lower letters appear in the shape of birds.

2—"Human-headed": In the second variety only the heads of letters are given human faces and this script, of which there are both Kūfic and Naskhī examples, is called "human-headed". The best example in which both "human-headed" Kūfic and Naskhī are depicted, is the fluted ewer in the British Museum. Another example is the twelve-sided ewer in the Hermitage Museum (Fig. , Pls. 22, 24, icf. p. ) in which two bands of "human-headed" Naskhī appears above and below the body, but twice when the word "salāma" appears in either band, the two tall letters lām and alif are given animal heads, probably a hare.

3—"Inhabited Naskhī writing": The third variety of writing is called by Rice, "inhabited Naskhī writing" . In this script, bird or harpy-figures are inserted between the letters, taking the
place of ornamental scrolls. In most cases they constitute a background to the lettering and do not form an integral part of the script, the best example is in the inscription on the fluted ewer in the Hermitage Museum (pl. 11, 14). This is therefore a somewhat different type of script because in the other examples either human or animal forms were attached to the letters. They are nevertheless an expression of the same ornamental tendency. The animals of these inscriptions are very often combined either with "animated" or "human-headed" script.

A detailed study of the inscription on an object, its epigraphical style and dated and signed sequence may help towards its identification. This is important even when the epigraphic inscription provides neither the names of owner nor maker nor the date, firstly because the style of writing may lead to its correct dating; secondly because it also helps to its localization.
FOOTNOTES TO CHAPTER VI.

1- This has been claimed by Ettinghausen, R., "The Wade Cup in the Cleveland Museum of Art, its origin and decorations," A.O., vol. 2, p. 357.

2- Barrett, Islamic Metalwork in the British Museum, Pls. 6, 7; Lane-Poole, S., The Art of the Saracens in Egypt, (London, 1886) p. 179.


4- Ibid. p. 22.

5- Ibid. p. 20.

CHAPTER VII

CONTENTS OF INSCRIPTIONS ON SALJŪQ METALWORK

This, of course, varies according to the function of the object. In a case where the subject matter is religious the words take the form of a prayer; if it is a dedication the epigraphy serves to convey a blessing and wishes for happiness and prosperity for the owner and occasionally someone besides the owner.

In less formal and more private instances poetic fragments may be discerned on metal objects, much in the fashion of Saljūq ceramics of the 13th Cent.

Finally the signatures of maker and decorator of the article and in a few instances its date appear:

1. THE STATUS OF METALWORKERS DURING THE SALJŪQ PERIOD

In surveying the field of Saljūq metalwork the impression is that the masters of this craft signed their work more often and more fully than did other artisans. The reasons for this are two-fold; firstly because the metalworker of this era was regarded
on the same level as or on an even higher level than other craftsmen and much of their work was commissioned by high-ranking people or were dedicated to such potentates. Their names on various articles is evidence for this claim (icf. p.173-82). Perhaps the most well-known example of this is on a large silver salver in the Boston Museum of Fine Arts, (1) in which the inscription states that this royal treasure was made on the orders of a queen by Hasan al-Kāshānī in 459/1066 and presented to the great Saljuq Sultan Alp-Arslān. But, there is much doubt about the authenticity and validity of the contents of its inscription. (2)

The Iranian Saljuq metalworker represented a small élite who by force of intelligence and manual skill succeeded in improving their social status. This is revealed by their signatures on their work. (3) There were also, of course, a few highly placed amateurs who made or adorned certain articles such as the bronze pen-case in the Hermitage Museum which has been decorated apparently by an amateur from a feudal family (4)(Pl. 58).
The masters' signatures on such objects provide evidence of which workshop was responsible for each specific part.

Any repetition of the name of one maker is rarely seen on bronze ware. If the name occurs prominently in one place then should it occur elsewhere it will occupy a very modest space. An example of this is found on two wash-basins, one of which belongs to the Archeological Museum of Teheran. On this the name of the maker is shown in the inscription on a curved side and repeated several times in a restricted form of shallow writing on the silver panels inlaid into the ornament. The second one from a later period is known as Le Baptistère de Saint Louis.

But the best example of this is the bronze pen-case, dated 542/1148, in the Hermitage Museum. On this the maker's name is shown twice in visible places where the writing does not differ in character from that of the inscription with which it is combined. The curious
thing about this repetition is that the name of the decorator, 'Umar b. al-Kadl, appears once as the personage responsible for the ornamentation of the pen-case and the second time follows immediately after four verses engraved on the sides of the Qalamdān as though to suggest he was also the author of the poem. (p. 58).

2. **THE SIGNATURES ON SALJUQ METALWORK.**

Several signed metal objects are preserved in museums and private collections and in the study of these the problem that arises is whether the "work of the master ...." refers to the maker of the mould or to the master who had ordered the mould for the casting of his work. There can be no certainty in this matter for sometimes it might be the master himself in charge of the casting of an object, at other times he might entrust this to one of his pupils. The answer can only be deduced by the study of the work itself, whether in its technical and artistic qualities it is the work of a highly skilled
master or not.

There is also the question of the distribution of tasks in the artistic decoration of metalwork between master and apprentice.

Sometimes those masters whose names were noted on their work referred to themselves only on that part of the whole which represented some personal peculiarity or originality. The rest which was commonplace and routine was apparently left to the apprentice.

3. THE NAMES OF THE OWNERS ON SALJUQ METAL VESSELS

The growth of town life during Saljuq times extended the circle of consumers for works of art in bronze. This extension was caused, among other reasons, by the increasing strong position of the merchants who aspired to the privileges hitherto reserved to hereditary feudal families. They, the merchants, imitated the customs and way of life of these families. Thus it was not only the officials of the institutions who were held in respect but the merchants also were honoured by all classes of the people and became
organized in corporate bodies so that the more prominent merchants were ranked amongst the "notables" of the city while the lesser merchants were ranked with the craft guilds in the bazars.

Under these new conditions in place of individual customers for metalware more and more anonymous purchasers began to appear. Evidence of this can be found in the bronze ware of the period on which the names of those to whom the objects had been dedicated were rarely inscribed. The short blessing devoted to the purchaser gave place to longer inscriptions expressing only good wishes. These inscriptions retained the earlier ending - "li šahibihi" - "to the owner" - the name of whom however being omitted (e.g. the 12th century bucket from Harat made by Muhammad al-Harawi) (Pl. 5). This omission of names and titles implies that the use of such objects was no longer restricted to nobles - for instance: the 11th century silver trąğ in the Staatliche Museum, Berlin, which has a Kufic inscription invoking prosperity upon
"abū-AL Ḥasan 'Ali ibn Muhammad" has no mention of a title.

One of the most famous examples of a metal object revealing the connection between the widening circle of consumers and the growth of the merchant class is the so-called "Bobrinski Kettle", dated 559/1163, in the Hermitage Museum. According to the inscription on this it was made at Harat by the caster Muhammād b."Abd al-Wahḥīd and inlayer Masūd b. ʿAbd al-Raḥmān for Rashīd al-Dīn ʿAzīzī b. Abu al-Hussayn merchant of Zanjān in North-West Iran. (Pl. 4).

4. POEMS ON METAL VESSELS

From the 12th century onwards a widespread use of poetic fragments was prevalent on works of art, particularly on ceramics. Most of the decoration on the ceramic wares of ʿUrgān, Rayy and Kashān consist of rhyming verses, especially the quatrains of Ṣūfī ʿUmar Khayyām which usually contain many descriptions of the potter and pottery. (See Chapter 3).

Poetry was less common on metal objects. The
few examples extant show that those poems which did appear on metal objects tend to be permeated by feelings of piety and, unlike the quatrains on contemporary ceramics, were less evocative of personal emotions. Of course it is most probable that the verses were selected to please whomever was destined to receive the vessel.

Best example is the bronze pen-case in the Hermitage Collection, 542/1148, (Pl. 58). There are two poems on this Qalamdān. On the upper side is a poem of two verses: — here is an altered and improved version of Giuzalian's translation:

"I was satisfied with the predetermination of God; I cut myself off from the hope of all creatures. God regarded me with favour while I lived. He will favour me in the future until I die".

The name of 'Umar b. Faḍl who in the inscription on the pen-case is mentioned as its maker is repeated here after the verses without any explanation which
could indicate that he was not only responsible for
the ornamentation of the Qalamdan but also the
author of the poem. The quatrain itself reads more
like the work of an amateur than of a celebrated poet.

On the lower side of the pen-case another four-
line verse is inscribed. This is anonymous and deals
figuratively with the pen and ink-well (qalam and
dawat). The style of the writing is close to cursive
Naskhi but the inscription is so crude that it makes
the dating of it more difficult. It would appear to
have been written some time in the 14th century which
puts it about two centuries later than the execution
(10) of the pen-case itself.

SIGNATURES: THE WORK:

1 - "'Amal".

With most signatures on Saljuq metalwork and
other crafts the terms used for opus are "'amal",
"'amala" and infrequently "sanat". This Arabic verbal
form "'amala" ("made") when it appears on Saljuq
metalwork can be taken to refer to the person whose name immediately follows it and would indicate that this distinctive part of the work had been conceived and completed by this particular master.

Although the casting of the individual art objects retained its importance great stress at this time was laid on their elaborate ornamentation. Thus in all cases, except those in which the object represents a common standard shape and is a specimen of individual artistic casting, the name placed directly after one of the verbal forms of "'āmal" ("made") is that not of the master-craftsman who cast the object but of the master-decorator and this holds true even when unaccompanied by the explanatory terms "al-naqsh" ("ornamentation") or "naqqāsh" ("decorator"). It therefore follows that the verbal forms of "'āmal" apply not to metalworkers only but in an even greater degree to those craftsmen whose skill is used in the decoration of these wares. It is in this sense that it is used in the inscription on the Bronze Kettle of Harat,
dated 559/1163, in the Hermitage Museum, which declares
it was made ('*duniya*') at Harat by caster Muhammad b. Abd
al-Wahid and decorated ('*'alam*') by Masud b. Ahmad (pl. 4).

2 - NAQSH AND NAQQASH

From the 12th century onwards, although the casting
of individual art objects retained its importance, a
greater stress was laid on the artist's elaborate
ornamentation. The Arabic words "al-naqsh" ("ornamentation")
and "'alam-naqsh" ("made the ornaments") with the noun
"naqqash" ("decorator") refer to the master-decorator
not to the master-caster. But there is an exception.
The inscription on the bronze pen-case in the Hermitage
Museum (pl. 58) appears to attribute the entire
work to one man, 'Umar b. al-Fadl, described as
"naqqash" ("decorator") which it seems may be taken
to apply not just to his profession but to his work on
the object. Yet to have all the stages of work on one
article concentrated in the hands of one artist would
at this period be an anachronism as on other contemporary
work, such as the bronze bucket of Harat (Pl. 5) and
the Bobrinski Kettle (pl. 4) both dating from the middle of the 12th century, give the names of two masters in each inscription.

There are a few examples showing how work was divided between the decorator and the other craftsmen.

First there is the bucket of Harat in the Hermitage Museum (pl. 4) on which, according to the inscription, part of the work was done by a professional master, Masūd b. Ahmad, described not just as "naqqāsh" ("decorator") but as "the decorator of Harat" ("an-naqqāsh Harat"). Second is a bronze bucket, also from Harat and also in the Hermitage, which was made in the 6th/12th century (pl. 5). This, according to its inscription, was inlaid by Muḥammad ibn Naṣir ibn Muhammad al-Harawī.

In both cases the work of the masters named is described as "'āmala naqsh" ("made the ornaments"). It is not out of place to notice here that in the signatures the combination of the verb "'āmal" does not mean the
shaping of the object. Third a bronze ewer made
("'amal") by Abd ar-Razzaq b. Masud ahl-Na'ishābūrī,
of an unspecified date which was probably in the
course of the 6th/12th century. This was formerly
in the Sarre Collection and is now in the Staatliche
Museum, Berlin (pl. 32). It was decorated
("naqsh") by Jand b. Hus (sain).

Finally in the Freer Gallery of Art, Washington,
DC (No. 367) there is a bronze pen-case made ("'amal")
in 607/1210-11 for a Vizir of Khwarizm and has the
signature of the decorator ("an-naqqāsh") Shadī.

Another example on which "'amal" has been
applied to both metalworkers and craftsmen engaged
in decoration is the remarkable aquamanile, formerly
in the Museum of the Academy of Science, Kiev, now in
the Hermitage Museum, Leningrad. This represents a cow
which though feeding her calf has a lion on her back
eating her hump (pl. 73).

The main Naskhī inscription written in Persian
begins on the cow's neck and is carried on to the throat
and from thence to the left and right sides of the animal:

"This cow, calf and lion were all made at the same time with the help of God - the All-Just Judge and the Nourisher - by the (labour) of Rūzbeh ibn Afridūn ibn Barzīn. Prosperity to its owner, Shāh Barzīn ibn Afridūn ibn Barzīn. Made by 'Alī ibn Muhammad ibn Abū al Qasīm, decorator".

The date written separately on both sides of the cow's muzzle is "Muḥarram, 603/1206."

The inscription on this aquamanile has been analysed by N.N. Diakonov and L.T. Gil'zalian. They offer disparate opinions. Diakonov does not consider Rūzbeh ibn Afridūn was a partner in the execution of this work and rejects the idea of his active craftsmanship. His argument is based on his reading of the words "bi 'āmali" ("the work of ...") as "ta 'āmil". This he translates as
"order" and deduces from this that Ruzbeh was no more than a customer and that the work itself must be attributed to 'Alî ibn Abû al-Qâsim despite the fact that he is only described as "naggâsh" ("decorator").

This interpretation of the words suggested by Diakonov even if it were justified in the context of the full inscription is not wholly convincing. First - the form "ta 'amil" is not common in inscriptions of metalwork, or for that matter on any other art form of the time. Second - for the entire work involved in the creation of any one metal object to be in the hands of only one master would at this period have been an anachronism as we have noted before (see icf. P. 138).

Gîuzalian's interpretation appears to be more plausible. His suggestion is that the name of Rûzbah, placed as it is before the verb "'amal" should be taken as that of a participant in the work, someone who finished the modelling and casting rather than the patron on whose order the aquamanile was made. Gîuzalian also argues that anyone who managed to complete such
a difficult technical task had reason enough to boast and that it would therefore be quite natural for Rūzbeh to emblazon his name. (17) This might also suggest that the object had been made by an amateur considering the similarity between the names of artist and owner, who appear to be brothers, and the fact that it was the former's name which comes first. (18)

There is also a third possibility, which is more likely: In regards to its calligraphic style of writing, and its meaning, it could be read "Bisây," which could mean "helping to make the object."

3- "duriba"

One other type-word used in inscriptions on Saljūq metal vessels is again Arabic and in the grammatical form as "'amala" and this is "duriba" (minted). It is found in the inscription on the
bronze bucket of Harāt (so-called Bobrinski bucket), in the Hermitage Museum (Pl. 4). The date (559/1163) appears on its handle, and on the rim the following inscription reads:

"This service has been ordered by ʿAbd al-Raḥmān ibn ʿAbd Allah al-Rashidī, ʿuriba Muḥammad ibn ʿAbd al-Wahīd, ʿamalā ḥajīb Masūd ibn ʿAbd al-Naqṣāsh in Harāt for its owner, the exalted excellency, the pillar of religion, the glory of the merchants, the trustee of the Moslems, the ornament of the pilgrims and holy cities Rashīd al-Dīn ʿAzīzī ibn Abu l-Ḥussain al-Zanjānī, may his glory last long."

Here however the term "ʿuriba" could refer to the minting of the cast since the verbal form of
"amala" is used to indicate the decorator.

On other examples of Harāt metalware the forms of "duriba" refer specifically to decoration. For example, in the State Museum of Georgia, Tiflis, there is a fluted ewer on which is the signature of the caster Maḥmūd ibn Muḥammad al-Harawi who made ("duriba") it in Shābān, 577/1181. (20)

4- NISBAH

A careful examination of the signatures on some metal objects reveals a "Nisbah" title after the name of the artist or owner. This can be helpful to a study of the object as it may be a nickname, honorary title, the birthplace or profession of the person to whom it refers. The suffix "nisbah" was commonly applied to persons of most social classes during this period and was often more widely used than the proper name of the person. A study of "nisbah" on Saljūq metalwork provides information about both the craftsmen and their participation in the production of the object.
a- Mushrif: Earlier than the Saljūq period there had been a prolonged continuity of administrative practice. In the Islamic epoch, especially under the Saljūqs, the old institutions gained a new meaning in Iran. As they continued to develop new elements of worth were added to the Iranian heritage. These were brought about by bureaucrats who were Iranians, not Turks. It was however the Saljūqs who were to some extent responsible for the spirit in which the new system worked. Saljūq metalwork provides good evidence of the importance of the officials of the period. The King and Princes patronised the art which was thus held in high esteem.

For example, the inkwell accorded to Ibn al-Athīr who served during the Saljūq period has the insignia of the Iranian Vazier. The bronze inkwell in the Kofler collection has an inscription on the surface of its lid referring to the owner:

The nisbah in this case is "Mushrif." The Mushrif was the head of the "divān-i-ishrāf," which was concerned with the auditing of financial transactions. According to Nizām al-Mulk he was aware of all that happened in the Sultān's Court and was expected to make reports when necessary. He was thus not only supervising financial matters but as well inspecting the administration in general. In the "Tārīkh-i-Bayhaqī," the Mushrif would be the treasurer to make an inventory of court property and to allot sums of money for the maintenance of the court.\(^{(24)}\) In the dastur-idabiri the mushrifs were concerned with the overseeing of the collection and disbursement of taxes. He supervised in general the administration of "auqāf."\(^{(25)}\) His nisbah and the titles before his name, both indicate that ʿAlī b. Muḥammad b. Ṭāhir was an inspector of the court treasury, whose name cannot unfortunately be found in historical records.
b- al-bayyā: The word "bayyā" has been used to mean a person of high rank in mercantile circles in several works of the 12th Cent. such as "Safar-Nāmeh" by Nasir Khusraw, 'Siyāsat-Nāmeh" by Niẓām al-Mulk, and in the 13th Cent. by Ibn Balkhī in the Fārs Nāmeh.

The word bayyā is first seen on the bronze pancase in the Hermitage (Pl. 53) dated 542/1148. [25] The nisbah bayyā follows the artist's name-'Umar b. al-Faḍl b. Yūsuf, and we should consider whether this describes his honorary title or profession. L.T. Giuzalian puts forward the theory that the qalamdān is the work of an amateur rather than a professional, suggesting that as the artist had a knowledge of the necessary technique he had made the qalamdān to present to some honoured and probably closely related man. The name of the recipient, he argues, resembles that of the artist and from this he reasons that 'Alī b. Yūsuf b. 'Uthmān al-Ḥājī, the owner of the qalamdan, was of the merchant class.
Secondly, the word bayyā is seen on the bronze inkwell, dated 6th/12th Cent. at the Metropolitan Museum of Art, New York, where it is placed after the name of the maker. (27)

Another word was "Ḥājib", also found in the inscription of the "Bobrinski Bucket" in the Hermitage Museum, Leningrad (Pl. 4). Although the nisbah of the artist is "al naqqash", expressing his profession, the appearance of Ḥājib leads us to consider whether this is the name of the title. The chief official of the court towards the end of the reign of Muḥammad b. Malik Shāh (511/1118) was called "Vakil-i-dār", but later this title was replaced by the "amir Ḥājib" (28) almost at the same time that the bucket of Harāt was made (559/1163). Although the name Masūd b. Aḥmad can not be found in historical records, we can not rule out the possibility of the argument that the artist was an amateur and an official of high rank (icf. p. 158).
d- The description *al-Hājī*, occurring in a name is a title of honour accorded to one who has made a pilgrimage to Mecca; it appears also on the "Bobrinski Bucket" after the owner's name (icf. p. 173). It is again found incised on the inside of the base of the "Wade Cup" but from the paleographic characteristic of the script it is quite clear that it was inserted several centuries later. (29)

e- Another nisbah which is found on several metal objects is the name of the birthplace of the maker which can provide a clue to the origin. For example, a bronze pen-box, formerly in the Sarre collection, now with an unknown owner, is dated 569/1173-4. (30) It was made by 'Umar b. Abī i-'Ala b. Ahmad Iṣfahānī.

A maker from Nishāpūr has signed himself 'Abd or-Razzāq b. Masūd an-Nishābūrī on two metal objects. The first is a bronze inkwell with silver inlay which was formerly in the Brummer collection and is now in the Metropolitan Museum of Art, New York. The second piece is a ewer (Pl. 32), dated
most probably 6th/12th Cent. and is now in the Staatliche Museum, Berlin. (31)

A small 12th Cent. bronze jug, (32) formerly in the Peytal collection, is signed by its maker ʿAlī b. ʿUmar al-Isfarāinī from Isfarāīn, a town in Khurāsān.

Two makers from Harāt have added to their signatures the nisbah of their town. Their names are Maḥmūd b. Muḥammad al-Harawi (icf. p. 174) and Muḥammad b. Nāṣir b. Muḥammad al-Harawi (icf. p. 168).

Also the nisbah of Zanjānī comes after the name of the owner of the Bucket of Harāt, dated 559/1163. Apparently he was a merchant from Zanjān, a town in Āzarbāijān (icf. p. 173).
Another characteristic of some of the signatures on Iranian metalwork of the 12-13th Cent. is that their Iranian names are followed by their Arabic nisbah or titles. For instance, the artist of the aquamanile in the Hermitage Museum (icf. p. 170) was Rūzbeh b. Afridûn Barzîn, His Iranian name is that of an ancient feudal family but it is followed by the Arabic word "bi-‘amala" ("the work of..."). Another inscription on the candlestick in the Hermitage Museum (33) includes a short wish "for happiness and prosperity" in Arabic as well as the first word of the signature "‘amal" (the work of), which is followed by the name of its artist,"Pāydar b. Marzbān al Qāyīnī".

"Pāydar" is an old Iranian name and the "Marzbān" has been used as a personal name ever since the time of the Sasanians. This man was from Qāyīn which was the administrative centre for the mountainous region of Kūhistān to the South of Khurāsān. "Kūhistān" was renowned for its many mountain castles which had enabled it to become one of the centres of power of the Ismā‘īlī sect in the 11th century (icf. p. 81).
Yet another example of an Arabic name following an Iranian name is on a semi-circular box, dated 600/1200. The inscription on this reads that it was made ("'amal") by Nushirvan, son of Muhammad. Two cylindrical inkwells, dated at the beginning of the 7th/13th century, were made ("'amal") by Shah Malik. Of these one is in the collection of Badron Carnady in Cairo while the other, formerly in the Peytel collection is now in the collection of Mr Ernest Kofler of Lucerne.

From this evidence we can conclude that several bronze vessels of the late 12th, early 13th, century had old Iranian names placed close to those in Arabic. These inscriptions are found on metalware from many different centres, mostly in Northern and Eastern Iran. The names usually appear in this order: firstly: the pure ancient Iranian name which is followed by a half-Iranian, half Muslim name and the third name is an Arabic nisbah. A possible explanation for this phenomenon is that the Arabic language was well
established amongst the elite which included the artists and artisans as well as the scholars.
Secondly: the religion of Iran had become Islam and consequently Muslim names were added to the original Iranian names. Thirdly: members of the professional classes used Muslim names with old Iranian names connected with the guilds and religious brotherhoods (akhir).
FOOTNOTES TO CHAPTER VII


2- Wiet, M., has made a detailed study of these inscriptions and concludes that the engraver had an imperfect knowledge of Arabic: Wiet, L'exposition persane de 1931, pp. 13-21, Nos. 8-14.


6- Rice, D.S. Le Baptistere de St. Louis, Paris, 1951.


Pope, Masterpieces, 1945, p. 64; Ashton, Metalwork, B.M.M.A. 1931 p. 31 Kratchkovskaya
10- Ibid, p. 117.


14- This inscription is by courtesy of the Hermitage Museum, Oriental Dept.

16- Giuzalian, op.cit. p. 104.
18- Mayer, op.cit. p. 59; Kratchkovskaya, Survey, vol. 4, p. 1774; Giuzalian, "The bronze jug of
19- For more details about this object see Ettinghausen,
   "The Bobrinski "Kettle"", Gazette des Beaux
   Arts, (1943) vol. XXIV, p. 196.
20- Included in the exhibition of Iranian art and
   archaeology, Hermitage Museum: See catalogue (in
   Russian) Fascicule, (Leningrad, 1935), P. 374;
21- Lambton, A.K.S., "The internal structure of the
   Saljûq Empire", The Cambridge history of Iran,
   vol. 5, pp. 223.
22- Ibn al-Athîr, al-Kâmîl Fil-Fârîkh, Leiden,
23- Kofler, M. Truniger, Luzern, Kunsthauz Zurich,
   August, 1964, p. 109, No. 1030 (catalogue);
   Baer, E.,"An Islamic inkwell in the Metropolitan
24- Lambton, op. cit. p. 226.
25- Al maḥārī, Muhammad b. ʿabd al Khāliq, Dastūr Dabīrī, pp. 111-12; Lambton, op. cit. p. 258.
31- Ibid, p. 68.
33- Giuzalian, op.cit. p. 85.
CHAPTER VIII
A DETAILED SURVEY OF SOME IRANIAN SALJŪQ METAL PRODUCTS
ESPECIALLY OF KHURĀSĀNIAN ORIGIN.

Saljūq metalwork has regional associations with their own style and characteristics due to the geographical situation and other historical and ecological factors. The Eastern Iranian provinces which provided one of the most important classes of Iranian Saljūq metalwork were where the Great Saljūq first came to power and where their power came to an end by the invasion of the Mongols in 1220 A.D.

Since the 11th Cent. the centres in the extreme East were not strictly in Iranian territory, however for more than a thousand years before they had been an essential part of the Iranian world. Linguistic and historical researches have shown that even in Achaemenid times the inhabitants of some cities like Būkhārā and Afrāsiāb (Samarqand) were descended from Iranian stock and continued the Iranian culture. (1) However, despite the infiltrations from the East which gradually modified the racial character of the population, the Sasanian tradition continued to make itself felt in art. The Iranian Saljūq metalwork of
the 12-13th Cent. are good evidence of this (icf. HH).

These metal art objects could only be made when there existed certain economic and intellectual conditions. There had to be large urban centres with an established manufacturing tradition and highly accomplished master craftsmen supplying the needs of an elite. An enthusiastic monarch was always influential in Iranian art, favouring every cultural enterprise; this tradition continued through to the last of the Saljūq line who ruled in Iran. Metalwork and all other arts achieved their highest level of perfection in the important centres and the capitals, such as Harāt, Naishāpūr, Rayy, Kirmān, and Hamadān. The evidences for this includes the general decorative themes of Saljūq metalwork, which illustrate the rich and varied life of the metropolis, including the social activities of the court scene (icf. pp. 91-6).

Moreover metalwork centres should be near the metal mines where the original work in earlier times started and carried on through the centuries. The metalurgy of copper, silver, lead, iron and tin all seem to have been developed in the broad region South of the Caspian Sea and the Khurāsān area. (2)
Furthermore the signatures of artists which appear on their works indicate the place of origin. For example the following list of objects were made by craftsmen whose "nisba" indicate that they came from Harât: two buckets made by artists of Harât signed by Muḥammad b. Abd al-Wāḥid and Ḥājib Masu'd b. Aḥmad made in Harât, dated 559/1163 and Muḥammad b. Nāṣir b. Muḥammad al-Haravī; and an inkwell signed by Muḥammad b. Abī 1-Sahl al Haravī in the Walters Art Gallery.

The decorative elements of typical Khurāsānian metalwork were previously discussed in Chapter IV. The objects that we shall present later will as well demonstrate that this class of Iranian Saljūq metalwork has a technically and decoratively distinctive style that can be attributed to the Eastern metal workshops.

Techniques and forms:

The system of production was not only beautiful, but it was also creative. The metalworkers were not content to produce objects with only a perfect shape,
but they applied various techniques to make them as elaborate as possible, such as engraving, répousse, and inlaying. This provided more decorative possibilities and also permitted highly delicate patterns such as vegetal scrolls and elaborate calligraphic elements.

Amongst the techniques the Saljūq artisan used, inlaying is the most characteristic of this period. The rudimentary inlaying technique was used in the Sasanian period (icf. pp.4849) and was later practised during the post-Sasanian times (icf. p.49) but technically and aesthetically it reached its perfection and became more widespread and extensive during the Saljūq period. The above-mentioned signed metalworks show that they were mostly the products of Harāt.

Saljūq metalwork was produced in every major type of technique, with subtle and ingenious variations. Here we attempt to demonstrate some selected objects which could illustrate the typical style, shape, technique and decorative elements of Saljūq metalwork.
EWERS

GROUP I. Pear-shaped ewers

From the 11th to the 13th Centuries, several different types of ewers were made in Iran, which clearly show the success of the adoption of a compromise between ancient traditions and the new style. These ewers are similar to those of Sasanian or post-Sasanian types and have a particular shape which distinguishes them from the other groups of Saljūq ewers. They are characterized by their pear-shaped bodies and narrow base, long neck and extended spout, like those on contemporary oil lamps. They have long handles in the shape of an extended animal topped with a knob for the thumb to hold when pouring.

1- Bronze ewer in the Louvre Museum (Pl. 18):

This ewer is composed of three parts: spout and neck; body and base; and handle. The neck is long and narrowed in the middle and the elongated spout is like that of the oil lamp (see Pls. 38 & 39). The pear-shaped body stands on its base with a sharp flare.
The curved handle is decorated on either side with deer heads and where it joins the neck and the body there is a knob. The decoration is distributed all over the surface of the piece according to the fashionable style of the period; i.e. geometrical and vegetal designs including palmette scrolls and half acanthus; two benedictory Kūfic bands are depicted on the shoulder and the base. Above and below the medallion appear friezes of hunting animals, while the double-ogee medallion itself depicts a romantic scene, in which a crowned prince is holding a beaker while a crowned princess is pouring him wine from a small ewer similar to the object itself. This may show the popular theme of Bahrām Gūr and Āzādeh (see p. 32).

Although the shape of this ewer followed the prototype, the general style, technique and characteristics are of typical late 12th Century Iranian Saljuq metalwork.

By the 10th Century the technique of relief casting gradually declined and the decoration
consisted mainly of engraving. The silver ewer in the Tehran Arch. Museum (Pl. 17) shows the technique of the prototype ewer. It was made in the 10th Century and has engraved and nielloed inscription bearing the name of Amīr Abūl-Abbās Walīn ibn Ḥārūn Mawla Amīr al-Kumīn (see p. 54).

1- The 12th Cent. ewer in the Detroit Museum of Art: (1)
The decoration consists of engraved bands in geometrical and vegetal designs with rosettes and Kūfic inscription. The medallion contains a bird, and the curved handle is similar to that on the Louvre Museum ewer, and terminates at each end in an animal head.

2- The 12th Cent. ewer in the Metropolitan Museum of Art, New York: (2) The general treatment of decoration is similar to other examples, with all over decoration of palmette scrolls and geometrical interlacing patterns, medallions and a frieze of hunting animals. There is also a band of benedictory Kūfic inscription round the neck.
There is also a bronze ewer in the Berlin Staatliche Museum (No. I. 3555) with the same pear shaped body as the rest of the ewers in this group. The characteristic which differentiates this piece from the others is its plain undecorated body.

This group of ewers are comparable to those of Sasanian or post-Sasanian ewers as regard to the following points: 1- the pear-shaped body; 2- the shape of the neck is only slightly different; the neck and body of the Saljuq type are the same piece to which the spout is attached; 3- the similarity of the spout; 4- the shape of the handle; 5- the band of inscription appears around the neck as it does on the post-Sasanian types (see Pl. 17).
EWERS

GROUP II

Description of the ewers of the II group:

These ewers are moulded and are composed of four parts: neck and spout; body; base; and handle. The necks are cylindrical with a long spout standing up sharply and a band connects the neck with the upper part of the body. The body itself is nearly spherical and the base is cylindrical with a slight flare and concave bottom.

Form:

Spout: the high spout resembles the head of a bird of prey and the most complete example is the ewer in the Berlin State Museum. They are all decorated with engraved vegetal and geometrical designs. Four or five small circles are regularly distributed on the spout and neck; two pierced bosses are placed on the sides of the spout, and one pierced boss is to be found on the underside of the spout, but is missing from the ewer in the Tehran Arch. Museum and the Berlin Museum ewer.
Two further bosses are found on the sides of the neck and these bosses seem to have held chains connecting two lids to the ewers (see Pl. 19). The top of the spout is decorated similarly in all cases (see Pl. 19B, Fig. 111-a.).

**Neck**: the neck is cylindrical and there is an oblique decorative pattern concealing the place where it joins the spout.

**Body and base**: the body of all examples is spherical and the base is cylindrical with a slight flare and the bottom of the base is concave (see Pl. 19). The only exception is the one in the Metropolitan Museum of Art, in which case the body is nearly spherical or almost globular. (2)

**Handle**: is rectangular in section and has small round projections at both ends, and is topped by a knob.

**Technique**: Most of this group of ewers are moulded and the original model must have been made of copper because most of the relief decorations were made by champlevé technique, i.e. hammering down
the background to make the designs appear in relief. Other decorative patterns have been engraved or sometimes inlaid either with silver or copper or with both. Silver inlay, supplemented by copper inlay are both used in narrow lines as has been found on a number of 12th Century Iranian Saljuq bronzes and this is one of the characteristics which indicates their date.

The most outstanding feature of their decoration is a bold Kufic inscription (either relief or engraved) round the middle of the spherical body and this is interrupted by medallions. Another narrower band of inscription decorates the shoulder and the remaining ornaments are distributed over the neck, spout, handles and foot.

1. The bronze ewer in the Jazayerî collection (Pl. 19): This is inlaid with silver and copper. The body is decorated with many inscriptions: those on the shoulder and body alternate with three decorative medallions. They contain the same benedictory formulae.
Bi-l-yumni wa-l-barakat-i at-tammat-i wa-surūr al-
Kamilat li-sahibihī.

With the happiness and the complete benediction
and the perfect gladness to its owner.

The most distinctive feature of this piece
is the six-lobed rosette in roundel, which is
repeated three times on the body and is similar to
that of the ewer in the Berlin State Museum.
The piece was found in Khurasān and with regard to
its inlaid technique and epigraphy it should be
dated early 12th Century.

There are three ewers which all share the same
shape and technique but have some distinctive
features as follows:

2. Bronze ewer in the State Museum of Berlin: (3)

This piece is very similar to that in the Jazāyerī
collection, both in shape and technique. The chief
characteristic of this piece is the inlaid six-
pointed star in medallion (see Fig. 112:b), which
interrupts the benedictory inscription on the body in
the same fashion as the Tehran ewer. This motif was
common in this period.
3- Bronze ewer in the Metropolitan Museum of Art
No. 59-53: The chief characteristic which
distinguishes it from the rest is its large Kufic
inscription in high relief around its flattened-
globular body. The latter itself is slightly
different in shape from the other pieces. The
inscription on the shoulder in three compartments
contains benediction to its owner and the name of the
artisan is not clearly written.

\[ \text{\textquoteleft سفان [ن] -\textasciitilde{u} al-Q\textasciitilde{a}sir \textquoteright} \]

\[ \text{\textquoteleft Made by al-Q\textasciitilde{a}sir\textquoteright} \]

4- Bronze ewer preserved in the National Museum of
Damascus, Department of Arab-Islamic Art. No. 15381:
This is probably the oldest ewer in this group, and
also the richest and the most elaborately decorated,
especially in its epigraphical detail. It bears on
the bottom the name of the artisan.

\[ \text{\textquoteleft \textasciitilde{amal\textasciitilde{~}} Hasan \textquoteright} \]

\[ \text{\textquoteleft Work of Hasan\textquoteright} \]

On the basis of technique, epigraphy and the decorative
elements it is probably an early 12th Century.
The ewers in group II are also comparable to those of the Sasanian and post-Sasanian periods as regards the following points: 1- the spherical body; 2- the shape and length of neck and handle (those of this group are shorter); 3- the similarity of the upper part of the body; 4- the general character of decoration and its distribution on the surface; 5- the use of the shape of a bird as a decorative element on the spout (there the whole spout is in the form of a head of a bird of prey).

There are ceramic ewers with a similar shape which were made between the 12th and 13th Cent. and this shows how the potters were influenced by the metal workers, who first created this group of ewers. For example the Metropolitan Museum of Art possesses a ceramic ewer, moulded with a cobalt-glazed epigraphical decoration in relief on the body.
EWERS

GROUP III

This type of ewer was particularly fashionable in the 12th to 13th Cent. and is the best example of the Iranian Saljūq style and was much imitated by ceramists. For example, the ceramic ewer in the Ashmolean Museum in Oxford, with moulded decoration underglazed, dated 12th or early 13th Cent., is very similar to this group of metal ewers and shows the influence of the metal worker on the ceramist.\(^{(1)}\)

A thorough study of all the different types of ewers in this group reveals that they all share the similar shape, technique, and decorative elements. They are all almost the same size; those that still have bases are almost the same height, the tallest being the ewer in the British Museum (40 cm.) and the shortest being the ewer in the Hermitage Museum (37 cm.). Amongst this group of ewers, the brass ewer in the State Museum of Georgia in Tiflis\(^{(2)}\) bears both its date and the place of its origin. It has been dated 577/1181 and signed by Maḥmūd ibn Muḥammad
of Harât. It appears that he composed the verses that extol its quality and state that this ewer was made for pouring water over the hand. (3) Its fluted body is inlaid with silver and copper with decorative arrangement to the ewers in the Hermitage Museum (icf. p.199) and the British Museum (icf. p.206). These decorations consist of twelve signs of the Zodiac and animated epigraphic bands and scrolls. Thus, by comparing the other pieces in this group with the Tiflis ewer we can attribute them to the East of Iran, and most probably to the workshops of Harât.

These ewers are composed of five parts: neck and attached spout; shoulder; body; base and simple straight handle attached to the upper part of the neck and to the side of the body.

Although the rest of the body remained unchanged in all examples, the surface of the body underwent changes so that we can divide the group into four types: 1- twelve-sided body; 2- twelve-sided body with a high relief frieze of birds or animals round the shoulder; 3- fluted body; 4- fluted body alternating with triangular ribs.
The decorative characteristics:

The most conspicuous feature besides the shape of their body is their characteristic embossed relief. This group of ewers are distinguished by the row of high-relief birds or lions, or rarely harpies which decorates the shoulder of some types of these ewers and there is also an embossed lion on either side of the neck and over the uptilted spout. The decorative elements are typical of the Iranian Saljuq style, with bands of inscription, and scrolls, panels and medallions which consist of Zodiac signs.

Technique: These ewers are richly inlaid with silver and copper. Technically, these specimens show how the inlaid technique was practiced, becoming much more advanced and more refined towards the end of the 12th Cent. and depicts the culmination of this technique, being richer than other inlaid pieces in this period. These ewers are mostly made of brass, which began to supplant bronzes as the body material in the late 12th and early 13th Cent. and are therefore more flexible for making delicate patterns. Instead of the usual engraved frieze of animals, the pieces are now decorated with embossed
The bronze ewer in the Hermitage Museum, Oriental Dept.

No. UP-1436 (Pl. 22): The body is duodecagonal (H. 39 cm.) with plain curved shape, which is different from the type of ewers with convex fluting. The whole surface has been richly decorated with animated inscriptions, banquet scenes and signs of the Zodiac. The 12 signs of the Zodiac are found in the medallions on each face. Four human-headed birds fill the gaps around each medallion (Pl. 23b). Both above and below the medallions are bands depicting seated musicians who are playing different kinds of musical instruments (Pl. 23b, 24). There are two bands of human-headed Naskhi inscription with interspersed birds and these bands form a continuous border around the upper and lower part of the body (Pl. 22, 24).

Neck and spout: There is a crouching lion on top of the spout (Pl. 22) and two embossed seated lions on the sides of the neck (Pl. 23a). A narrow collar separates a frieze of running animals around the lower part of the neck from a band of human-headed Naskhi inscription. Below the embossed lions
there are two animals back to back, and above the lion and on each side there is a band of inscription. **Shoulder:** is made of flat surface and curved rim where it is attached to the body. A band containing **court scenes** covers the flat surface, while the curved rim is decorated all round with **hunting scenes** (Pl. 22).

**Handle:** is in one piece; it is straight and simple with its top part attached to the neck and lower part to the body. It has been decorated all over with engraved scroll pattern.

**Base:** is cylindrical with a later additional flared foot. A band of "drop" shaped patterns decorate its upper part and the rest is covered with Naskhī inscription.

With regard to its shape, technique, decoration and style of inscription and in comparison to the other dated ewers, this piece could be dated to the late 12th Cent and be attributed to the North-East of Iran, most probably to the Harāt workshop.
TYPE 2:

What distinguishes this type of ewers from the previous type is the appearance of a frieze of animals or birds in high-relief around the shoulder. This new decorative ornamentation is of the characteristic elements of Iranian Saljuq metalwork of the second half of the 12th Cent. This kind of animal or bird frieze not only decorates ewers with flat twelve-sided bodies, but also the fluted types which are discussed later.

There are two examples of this type of ewer in the Hermitage Museum (Pls. 28, 31). These are richly inlaid with both silver and copper, and their technique, shape and general ornamental characteristics are common to the other ewers in this group.

The first example, of height 28.5 cm. (Pl. 28) is composed of four parts (the base is missing and the top part of its spout is also broken):

Body: It has a duodecagonal body, with its ornamentation laid out in three horizontal bands; the middle part consists of twelve double-ogee
medallions interlocked with each other. They are filled with vegetal scrolls, and a crescent with a diamond partly encircled by it, which may possibly be a symbolic motif referring to the moon and star (Pl. 29). The double lines bordering these medallions form a vase shape pattern for two palmettes, above and below the medallions. This motif exactly reappears on another twelve-sided ewer in the Hermitage Museum (Pl. 26). On the upper and lower part of the body, there are two bands of Naskhi inscription containing the customary benediction. These bands are divided into twelve separate segments, each segment being bordered above and below by double straight lines. The sides of each segment are bordered by wavy lines, which, as far as the author can recall only appear on these type of ewers (see Pl. 25). Perhaps this pattern and the plaited one on the handle are ancient symbolic motifs for water, and this would be appropriate for this water container.
Shoulder: The flat part of the shoulder is covered with a band of Naskhi in the same fashion as those on the body. The curved rim of the shoulder is decorated with a frieze of twenty-four birds in high-relief.

Neck: This is tall and cylindrical with a band at the collar connecting it to the shoulder. A band of Naskhi inscription appears around its lower part, and a band of vegetal scrolls decorates its upper part and the remaining part of the spout. In the same fashion as the rest of the ewers in this group, two embossed seated lions decorate either side of the neck, and a nine-petalled rosette, acting as a sun, appears next to the lion. This ancient symbolic theme of a lion and sun is not unique on the ewers of this group since it appears on the body of the ewer in the Hermitage Museum (see Pl. 24) as a Zodiac sign representing Leo, and also on the ewer in the Metropolitan Museum of Art (cf. pp. 623).
The second example is also in the Hermitage Museum (Pl. 31) and is composed of five parts (H. 37 cm):  

**Body:** This is duodecagonal with its surface divided into three horizontal bands: The middle one consists of a stylized "tree of life", with two six-petalled rosettes filling the spaces on either side above the tree and acanthus below the tree; The upper band contains plaited Kūfic inscription and the lower band consists of **benedictory** Naskhī inscription. Beneath the lower band, near the base, there are medallions filled with an interlaced pattern.  

**Shoulder:** There is a frieze of twenty four birds, each pair , with their wings interlocked. The flat surface is decorated with Naskhī inscription.  

**Neck and spout:** The long cylindrical neck is decorated with two embossed seated lions on either side. The lions are framed by a band of Kūfic inscription and there is a band of plaited pattern on the narrow collar where the neck is attached to the shoulder. The uptilted spout, attached to the neck has been topped with an embossed crouching lion.
Handle: This is in one piece; it is straight and simple with its top part attached to the neck and lower part to the body. It is decorated all over with engraved scroll pattern.

Base: The only ornament decorating the flared cylindrical base is a band of plaited pattern similar to the one appearing on the collar of its neck, the handle of the previous ewer (Pl. 31); the base of the type-four ewer in the Staatliche Museum, Berlin, (Pl. 32); on the late 12th Cent. bronze mortar from Khūrāsān in the Staatliche Museum (No. I/289) (Pl. 69) (cf. p. 105).

Date and place of origin of these two ewers:

With regard to their shape, technique, decoration, and the appearance of both Kūfic and Naskhī style of inscription, and the use of copper in their inlay, and in comparison to the dated ewer in Tiflis, these pieces could be dated to the late 12th Cent, and they can be attributed to the Eastern Iranian workshop.
TYPE 3:

This type of ewers have a twelve-fluted body, but the general shape of the body remains the same as the twelve-sided ewers.

One of the best examples of this type of ewer is the late 12th Cent. brass ewer in the British Museum. This piece has been richly inlaid with silver; copper is used only to decorate the eyes of the embossed birds. The shape and the decoration of its neck and handle are very similar to those of the ewers of this group. The surface of the body is divided into six different bands: the larger central band consists of twelve Zodiac signs which are bordered by two narrow bands depicting friezes of animals and sphinxes. Animated inscription decorates the upper and lower part of the body. The lowest part of the body, near the base, is decorated with twelve roundels, filled with different patterns.
TYPE 4:

What differentiates this type of ewer from those of type three is its additional triangular ribs, so that the body consists of convex fluting alternated with triangular ribs; the rest of the ewer remains the same.

The best example of this type is the bronze ewer in the Staatliche Museum of Berlin (No. I. 3568) (Pl. 32). The size (H. 38 cm.), the general shape and the technique of this ewer are similar to others in this group.

Body: The general arrangement of its decoration is different to those of other types of ewer. In this case, the ornamentation consists of bands of benedictory Naskhi inscription appearing vertically on the convex fluting and scrolls on the triangular ribs.

Shoulder: The curved rim of the shoulder is decorated with a frieze of twenty four seated lions in high-relief.

Neck and spout: This is made in the same fashion as other ewers of this group, with two embossed seated
lions on the sides of the neck and a crouching embossed lion on the uptilted spout. Unlike the others, the ornamentation of the neck is simple and consists only of vegetal scrolls.

Handle: This is in one piece; it is straight and simple, with its top part attached to the neck and lower part to the body.

Base: This is cylindrical with a flare; it is decorated by a band of plaited patterns like those on another ewer in the Hermitage Museum (Pl. 31) (cf. 205).

Date and place of origin: The similarity of this piece to the others leads us to attribute it to the Eastern Iranian workshop, but the lack of copper inlay (this piece has only been inlaid with silver) and the lack of Kufic inscription, as well as the form of its body, all indicates that it was made later than the other types of ewers in this group, most probably the late 12th Cent or the early 13th Cent.
List of examples of this group of late 12th, early 13th Cent. ewers in different museums and collections:

1- Ewer in the Louvre Museum (for illustration see Survey, vol VI, Pl. 1328). Brass inlaid with silver, Late 12th Cent.


3- Ewer in the Victoria and Albert Museum, brass, copper inlaid with silver, 12-13 Cent. H. 43.7 cm. (see Survey, vol. VI, Pl. 1324).

4- Ewer in the J. Hamberg Collection, brass, silver inlaid, 12-13 Cent., H. 44 cm. (for illustration see Survey, vol. VI, Pl. 1324).

FOOTNOTES FOR GROUP I EWERS

2- Dimand A., "A Persian bronze ewer of the 12th Century", B.M.M.A. XXIX, (1934) p. 25, Fig. 1.

FOOTNOTES FOR GROUP II EWERS

3- Staatliche Museum Berlin No. I. 1598; Ernst Kuhnel, Islamische Kleinkunst, (Berlin, 1925) p. 141, Fig. 108; Pope, Survey, vol. III, p. 2483; Survey, vol. VI, Pl. 1277, Fig. C.
6- Lane. A., Early Islamic Pottery, (London, 1957), p. 34, Pl. 42, Fig. D.

FOOTNOTES FOR GROUP III EWERS

1- Ashmolean Museum, Oxford (Barlow Collection)
   No. 1956-180.

2- Grofin P.C. Umarov, Die Sammlungen des Kauheischen
   Museum, vol V, (Tiflis, 1902) No. 135, Pl. XV.

3- Barrett. D., Islamic Metalwork in the British
   Museum, p. X.


5- For illustration see Barrett. D., op.cit. Pls. 6&7;
   and for details of the decoration on this ewer
   and the similar piece also in the British Museum,
   see Lanci. M., Trattato delle simboliche rappresentanze
   arabe, (Paris, 1845-6), T. XXVII-XXX.
STANDS

In general the well-preserved stands of this period are made of three separate joined cast bronze parts, which are: 1- base; 2- stem; 3- top. It is rather difficult to make a general categorization of these vessels which reached us from the 12-13th Cent. because the ratio of all the examples that are well-preserved is not very high in comparison with other kinds of object from the same period. This was perhaps due to the fact that they were made of joined pieces that could be lost easily, and the top part was especially vulnerable. But still there are a few well-preserved examples to show the different types of these stands, such as the bronze stand in the British Museum. Since its attached lamp on top of its body is preserved, it shows how these objects were used as stands for oil lamps. It has an engraved cylindrical stem with joined cast "vase" shaped segments at the top and bottom of it. Its base is made of six concave pear-shaped lobes, most probably to catch the oil drips. The original
function of these objects has been also shown on the Turkestan Frescoes where we find a kind of lamp similar to these, with a broad, round stand, a cylindrical holder and a cup-like part at the top.\(^2\)

Although the general form of these stands remained the same throughout the 12-13 Cent., the shape of the base underwent considerable change. Therefore, judging by this transformation of the base of these stands, we can put them into at least two distinct types: 1- base with concave profile, which is generally made of six concave pear-shaped lobes standing on three zoomorphic\(^2\) shaped legs; 2- base with convex profile, the earlier examples standing on legs but later examples standing on a flat ring base, and in this type the top accordingly changed into a tray to catch the oil drips.

**Group 1:**

**Bronze stand acquired in Khurasan, in the Jazayeri Collection, Tehran (Pl.43):**\(^3\) This is a well preserved piece (H. 45 cm) which consists of three parts: **Base:** is made of six concave pear-shaped lobes
standing on three zoomorphical legs. The surface of the base is decorated with engraved simple geometrical and vegetal design, and a band of Kufic inscription on the curved rim of the base. **Stem**: is made of four "vase-shaped" joined segments. The two "vases" on the top and lower part of the stem are hollow-cast so that they fit onto protruberances from the tray and base. The decoration of the stem is similar to the base, with an additional Kufic inscription. **Tray**: its rim is curved outwards and downwards, and the vertical upright rim is about one centimetre high, and decorated with pierced openwork design. Below this upright part of the rim, on the curved part is a narrow band of plaited motif and below this on the almost horizontal part of the rim, there are six panels containing Kufic inscription. In the centre of the tray there is a circle bordered by an engraved line and around this there are four inscriptions in Kufic separated by small roundels.
Bronze stand from Khurasan in Tehran Arch. M. (Pl. 41):

This piece consists of only two parts; the upper part is missing: the base is made of six concave pear-shaped lobes standing on three zoomorphical shaped legs in the same manner as the previous piece. There is very little ornamentation on its surface, but the main motif is the figure of a harpy at the middle of the medallion on each lobe of the base. The rest of the surface of the base and feet are decorated with vegetal patterns. The only part of the stem remaining is one "vase-shaped" segment with a bulbous body which is hollow cast and has an asymmetric longish opening on either side. Its bottom is fitted onto the wedge-shaped protrubrance of the base. Its only decoration consists of a plaited band which was a common motif of metalwork of this period (icf. p. ).

There are two similar pieces, also with their top part missing and the same shape, technique and arrangement of decorative elements. One is in the Detroit Institute of Art (4) and the other is in the British Museum, acquired in Bukhara (5).
This group of stands can be attributed to the first half of the 12th Cent. for the following reasons: their cast technique; the usage of engraving technique instead of inlaying; the general arrangement of the decorative elements, which all appear in isolated individual panels as well as their shapes; the absence of Naskhi; the style of the Kufic inscription.

**Group 2: Type 1:**

*Cast bronze stand in the Moqaddam Collection, Tehran*(6) (Pl. 42): This is a good example of this group. It is made of three parts, the upper part is a recent addition.

**Base:** is hemi-spherical and rests on a narrow ring to which three separate zoomorphical shaped legs are attached. The flat upper surface of each leg has a decorative split on each side of the leg; this is similar to the bronze stand in the Cleveland Museum of Art, but in that case instead of the split, there is a tigers head decorating the legs.(7)

**Stem:** Unlike the first group, the stem of this stand
is made of three joined pieces; the middle one is a cylindrical shape joined on either side to two hollow cast "vase" shaped segments. The decorations on the surface of the base are badly damaged, but those on the stem are in better condition and are executed in two technical processes: engraving and open work. The openwork technique appears in two panels containing Kufic inscription which appear on the cylindrical part of the stem. Two bands of engraved plaited patterns, like those on the stand in the Tehran Arch. M, decorate the stem above and below the openworked parts.

Date: The stand may be dated to the mid-12th Cent., in regard to its spherical shaped base which became fashionable towards the second half of the 12th Cent., and also because of its humble employment of openwork technique. This later became more refined and elaborate as on the brass stand in the Hermitage Museum, Leningrad (Pl. 44).

Type 2:
The differentiating characteristic of this type
of stand is the form of their base which is essentially bell-shaped and made of three parts as shown in the figure. The upper part is the tallest and narrowest segment and is concave in profile, similar to the base of the oil lamp in the Hermitage Museum (Pl. 44). The other two segments are shorter and almost cylindrical, each with a slight flare. The stem is generally made of one or two "vase" shaped segments and the top tray is similar to the stand in the Jazayeri Collection (Pl. 43). The examples of this type are in the Armenian Historical Museum in Yerevan, at the Kabul Museum and in the Francis Hopp Museum of Eastern Asiatic Arts, Budapest. This type of stand was carried on through later times, for example a piece in the Louvre Museum.
FOOTNOTES FOR STANDS

1- Barrett, D., *Islamic Metalwork In the British Museum*, Pl. 4a.

2- Le Coq, *Bilderatlas zur Kunst und Kulturgeschichte Mittelasiens*, (Berlin, 1935) p. 41, Fig. 11; Brunwedel, A., *Altbuddhistische Kultstatten in Chinesisch-Turkestan*, (Berlin, 1912) p. 123, Fig. 272.

3- This piece is unpublished.


5- Barrett, op. cit. Pl. 3.

6- This piece is unpublished.

7- Hollis, H.C., "A unique Saljuq bronze", *A.I.*, vol. II, 1935, p. 231, Fig. 1-2.

8- Abramyan, V.A., *The Crafts in Armenia from the 4th to the 18th Century*, (in Armenian) (Yerevan, 1956) p. 62, Fig. 17.


10- This piece has been extensively discussed by Laszlo Ferenczy, "A Saljuk bronze from Iran, a present

11- Bronze stand inlaid with silver and gold, signed by azzal-Din Isfahani "Vaqf" for Mausoleum of Khawjeh Ahmed Yasavi.
INKWELLS

It was only with the elaboration of the technique of calligraphy during the Saljūq period that objects such as pen cases (qalamdān) or inkwells (dawāt or miḥbara) gained real importance, and came to be regarded as presentation pieces. At the same time evidence is not lacking of a long previous tradition of the manufacture of such vessels in Eastern Iran. For the manufacture of the inkpot, a simple rounded shape was preferred. As ʿalāʾ al-Dīn b. Muḥammad says "Inkwells were made in round shapes because dirt could not accumulate in the corners and thus they could be kept clean." (1)

Examples of this shape were discovered in Naishāpūr, and are probably ascribable to the 9th-10th Cent. A.D. The examples published or known to the writer are assembled in the following list: 1- Tehran Arch. Museum (acc. no. 3242) unpublished (Pl. 54, below), a small cast-bronze inkwell (H. 2.5), (diam. 3.5 cm) with three handles, cylindrical,
tapering towards the top. The simple linear design on the body is rendered in niello; 2- In the Metropolitan Museum of Art (acc.no. 40-170-116); 3- Two in the L.A. Mayer Memorial, Jerusalem (no. G 32-69 and no. G 42-69).

The description and especial characteristics of 12-13th Cent. Iranian Saljuq inkwells:

They are comparatively small size vessels, usually not higher than 10 cm. Each of the completely preserved specimens has a separate cover with a domed centre. The body has either a flat base or three low feet which are cut together with the body. The lid as well as the body is generally provided with small loops or handles, and this was because the writers or calligraphers often used to fasten them to their belt.

In the periods immediately following, the shape of the body remained unchanged, but the form of the central dome of the cover was modified.

As happened in the contemporary architectural
monuments, the shape of the dome changed to a cupola. Therefore we can categorize the shape of the central dome of the cover into two groups:

1- The earliest group are lobed-dome shape and rest on a flat cylindrical collar. It consists of six or occasionally eight pear-shaped lobes which are usually worked in low relief with roundel motifs and on top there is often a pomegranate shaped knob.

2- The later group has a spherical dome that rests directly on the horizontal rim. It is usually decorated with an overall pattern of scroll, and is surmounted with a lobe-shaped finial terminating in a round knob.

Here we shall present three unpublished examples of the 12th Cent. Iranian Saljuq inkwells:

1- A bronze inkwell in the Jazayeri collection, Tehran (Pl. 52): is a cast bronze engraved and inlaid with silver and copper.

Form: The shape of this inkwell is similar to other pieces from this period. It has a cylindrical body with a total height of 10.5 cm. with three hinged
loops on the body and three loops on the lid.
The centre of the cover is surmounted by a dome
of six lobes; this dome rests on a flat cylindrical
collar. The six pear shaped lobes are in low
relief with a roundel at the centre, and have a
narrow disc inserted between the pointed finial
of the dome and the pomegranate-shaped surmounting
knob.

Decoration: The inlaid decoration of the body is
isolated, unlike the all-over decoration of the
later Saljuq period. There are three doubled-ogee
medallions (Pl. 53) filled with interlacing scrolls
terminating in three petalled flowers. The scrolls
are inlaid with silver and the flowers are of red
copper which makes an attractive combination of
colours. On either side of each medallion are
so called "flower vase" motifs (Pl. 54). A typical
Saljuq bird is placed in a circle which arises (105)
from the top of the vase (Pl. 54). There are two
bands of inscription on the cover: one on its
level surface in Naskhi and one on the rim in Kufic. Near the base there are four oblong panels of Naskhi inscription. The inscriptions are all silver inlaid and decorated with very fine interlaced arabesque scrolls in their background. They are of the customary benedictory inscriptions. This inkwell was found in Naishapur and there are some elements that indicate an early 12th Cent.

Date: 1— the conventional symmetrical decoration and the pomegranate knob on the cover were both descendants of the Sasanian heritage that passed out of fashion towards the late 12th Cent; 2— the appearance of both Kufic and Naskhi; 3— the use of both silver and red copper for inlaying; 4— the figure of a bird, probably a duck, which is repeated six times on this object is comparable to the birds on other specimens of this period and especially identical to those on dated pieces such as the bucket of Harat (Pl. 4) and the pencase, also from Harat (Pl. 58) (see p. 110).
Very similar to this piece is the inkwell in the Kofler collection, which may be from the same workshop in Khurásán. The shape of the body and the domed cover are almost exactly the same; the similarity extends to the technique, general style and the decorative arrangement on the body and cover. They both have double-geee medallions and a typical Saljūq bird. Inscriptions also appear in the same places, i.e. the level surface and the rim of the cover and in the oblong panels in the lower part of the body. Only the genre of the decorative patterns are different. The piece in the Jazāyerī collection is less conventional and suggests that its owner was perhaps of a less important rank than that of the second piece in the Kofler collection. In the latter case, the inscription on the surface of the lid indicates the high status of the owner (see p. 177). The other important feature of the second piece is its unique iconographic expression; the medallions
clearly show the function of these inkwells; in the case of one medallion, the owner is shown with a pointed pen (qalam) and a sheet of paper; in the second he has a triangular object in his hand; in the third the owner is holding a cylindrical inkwell of the same type as the vessel itself.

2- Another cast bronze inkwell in the Jazayeri collection, Tehran (Pl. 55): is a fine specimen of the same type. It is decorated with an engraved pattern and silver inlaid inscriptions with margins of red copper.

Form: the shape is very similar to other pieces in this group, and also the inkwell in the British Museum, having a cylindrical body and total height of 11 cm. There were originally three handles on the body, but one is now missing. The lid has also three loops. The lobed-dome cover has the same shape and decoration as the other pieces.

Decoration: The decoration on the cover includes a
band of Naskhī inscription on the surface level and the only band of Kūfic inscription appears on the rim of the cover. The surface is divided into three horizontal bands; the upper and lower contain Naskhī benedictory inscription and the middle band depicts a festive scene on a frieze of twelve seated men, every pair facing each other and each man holding a beaker in his raised right hand. This inkwell was found in Naishapūr and every element indicates that it is a product of the Khurasan workshop, like the other piece in the Jazayerī collection.

3- The bronze inkwell in the Broughī collection, Tehran (Pl. 56): is made of bronze, inlaid with silver and red copper.

Form: The shape of the body is similar to the other inkwells in this group, i.e. it is cylindrical (height 6 cm). Although the holders are missing, there is a trace of three hinged loops on the body and three loops on the cover. The central dome is
Decoration: The only inscription is in Naskhi, containing the customary benediction and good wishes for its owner, and it appears on the level surface of the cover. The rim of the cover is decorated with vegetal scrolls all round. There are six medallions on the body; each pair is continuously interlocked. They all depict hunting scenes: horseman carrying a spear or arrow, or a falconer carrying a falcon on his hand (Pl. 57). The latter figure also appears on the 12th Cent. hexagonal box from Khurāsān in the Keir collection (No. 99). There is a frieze of running animals above and below the medallions. There are three rosettes and three vegetal scroll motifs in each band in between pairs of chasing animals. All the figures are inlaid with silver in contrast to the borders and vegetal scrolls which are inlaid with red copper.

Dating: The dome cover of this inkwell is missing and therefore a useful clue is lacking, but the
style, iconographic and epigraphic characteristics of the rest of the piece and the advanced technique of the workmanship all indicates that it was made later than the other two pieces in the Jazayeri collection; it was probably made in the late 12th Cent. Further evidence is also found in two similar inkwells which were both ascribed to the Khurāsān workshops and attributed to the late 12th Cent.; one is in the Keir collection and one is in the Metropolitan Museum of Art. The inkwell in the Keir collection (No. 100) is also a bronze inlaid with silver and copper. It has a similarly shaped body and a benedictory Naskhī inscription on the level surface of the cover and another one in Kūfic on the rim. Also the surface of the body is decorated with medallions, in this case in double row, interlaced with each other.

There is also a similarity between the iconographic elements of the piece in the Foroughī collection and the inkwell in the Metropolitan Museum of Art (formerly in the Charles Lége
collection in Paris).\(^{(7)}\) This late 12th Cent. cast bronze inkwell has the same body shape, but its distinctive feature is its three low almond-shaped feet which are lacking in the other above-mentioned inkwells. The shape of the central dome of the cover of this piece is of the second group; in this case the lobe-shaped dome of the earlier group of inkwells appears only as the knob on top of the replaced cupola, now a hemispherical shape resting directly on main part of the cover. This change only appears towards the late 12th Cent. The similarity between these two pieces extends to the decoration of the body, however; the surface of the body is divided into three horizontal bands, the upper and lower bands depicting a frieze of running animals and the wide central band contains several large medallions which in the case of the piece in the Metropolitan Museum depict signs of the Zodiac.
Dating and place of origin of inkwells:

The iconographic characteristics and epigraphic details and style of decoration of these inkwells indicates that they were produced in Eastern Iranian metal workshops. There are also other factors which should be taken into account here: 1- most of these inkwells have been inlaid with both silver and red copper inlay; the extensive use of red copper inlay indicates a 12th Cent. date. This technique was commonly used during the 12th Cent. most particularly in Eastern workshops of Iran (see p. ) and later passed out of fashion in the middle of the 13th Cent.; (2) 2- From the mid 12th Cent. onwards, Kufic and Naskhī were used side by side. Almost all of the known inkwells bear both Kufic and Naskhī inscriptions and the band of Kufic inscription usually appears on the rim of the lid; 3- The signatures on some of these inkwells are probably a useful clue which attributes these pieces to the Khurāsānian
workshops. The 12th Cent inkwell in the Walters Art Gallery, Baltimore (No. 54-514) was signed by Luḥammad Ābil Sahl from Karāt. The shape of this inlaid inkwell is similar to other pieces with lobe-domed lid. Another East Iranian specimen of this group of inkwells is signed by Luḥammad b. al-Bayya and is now in the Metropolitan Museum of Art (see p. 175). From the later period, in the early 13th Cent., there are three similar inkpots each bearing the name of their artists: Shāh Malik (p. 180) and Abd al-Kazzāq b. Kasūd al-Naishābūr and Naṣīr b. Asūd al-Naishābūrī (pp. 181-2). The nisba of the two latter artists indicates that they were from Naishapur and suggests that they made their inkpots in the Khurasan region too.
FOOTNOTES FOR INKWELLS

1- Qalqashandi, Subh al-asha (Cairo, 1913-1919)
   vol. II, p. 458, lines 2-9; Grohman.A, Arabische

2- Baer.E, "An Islamic Inkwell in the Metropolitan
   Museum of Art", Islamic Art in Metropolitan Museum of Art,
   (1972), p. 194.

3- Baer.E, op. cit., p. 199-200, figs. 1-5.

4- Barrett.D, Islamic Metalwork in the British
   Museum, p. 9, Pl. 56.

5- Dr. G. Fehervari kindly provided me with a
   photograph of this unpublished object.

6- Dr. G. Fehervári kindly provided me with a
   photograph of this unpublished object.


8- Rice. D. S., "Studies of Islamic Metalwork", II. B.S.O.A.S,
   vol. XV/1, (1953), p. 69-79; ibid. "Studies of

9- Ettinghausen. R., " The Bobrinski Kettle patron
   and Style of an Islamic Bronze", Gazette des
   Beaux Arts, (1943), vol. XXIV, p. 199, fig. 4;
   Ağā-Oğlu, "Two Artists from Nishapur", p. 121;
   Mayer, Islamic Metalworkers and their Works, pg. 65.
INKMORTARS

Inkmortars are comparatively small objects; apparently the Iranian Saljuq artists made them at the same time as the inkwells. These were regarded as useful objects; dry ink was powdered in them and then soaked in water. Their long spout was used to pour the ink into the inkwells. In contrast to these shallow vessels the long tube at the middle of the inkwell was suitably shaped to accommodate the pen (qalam). The small surface of these objects did not leave much room for the rich decorations that are found on inkwells. Maybe the artists did not regard them as presentation pieces. Therefore these mortars were never regarded as objet d'art and were not kept with the artistically decorated inkwells in art collections.

There are few remaining examples of these small cast bronze inkmortars (mūrakkab-dān). Generally the well preserved specimens are composed of four parts: 1- a small hemispherical pot with a rim; 2- attached to the rim on either side of the pot are
two holders which were probably for resting on a stand; 3— between the two small holders there is a bigger handle with a wide surface; 4— opposite to the handle is a long spout for pouring the ink out of the pot into an inkwell.

Examples of this shape were discovered with Saljūq material in the excavations of the Tehran Archaeological Museum in Gūrgān and Naighāpūr and are probably ascribable to the 12-13th Cent. A.D. These two well preserved inkmortars are now in the Tehran Archaeological Museum: the first was found in Gūrgān; the pot is 2 cm. in height and 4 cm. in diameter. It has a pierced handle (Pl. 59) and the holders are three-lobed. Another example was found in Naighāpūr and is similar to the first one; It is also cast bronze, and the pot is 3 cm. in height and 5 cm. in diameter. The holders are pierced and one is slightly damaged. The only decoration of this inkpot are the high relief roundels on the surface of the handle.
MIRRORS

The art of casting bronze objects with relief decoration was mostly practised in making mirrors with addorsed sphinxes or harpies and Kufic inscription. They are dated from the 11th Cent. onwards. Cast in low relief, they are always disc-shaped and a few have handles. There is not much variety in their decoration. Mirrors were considered as having mystical and magical powers and thus its ornamentation should have some kind of cosmological meaning. In general principle, their decoration is like those of plates, but because of the smaller area, the central medallion is the main decorative theme, with friezes of running sphinxes or sphinxes back to back, being the commonest theme borderes with benedictory inscriptions.

The most common shapes of these mirrors are found in two groups:

Group I: In this group, the roundel at the middle contains two human-headed animals back to back on either side of the conventional "tree of life".
Around the rim is a band of Kufic benedictory inscription. There are few remaining examples of this group of mirrors which are the same size and shape and apparently the same mould was used for this group; examples are the bronze mirror in the Brough collection in Tehran (Pl. 61) and two identical bronze mirrors in the Gemeentemuseum in the Hague (Pl. 62) and another one in the British Museum.

**Group II:** This group of mirrors are made in a rather larger scale than the first group. Like the first group they have benedictory Kufic inscriptions around the rim. But here the human-headed animals appear as four which are walking clockwise. It has also more engraved vegetal scrolls in the background than the first group. The best example of this group is the bronze mirror in the Staatliche Museum Berlin (Pl. 63).

The general characteristics of the sphinxes:

These sphinxes have a pair of wings with joined tips. The human head is either bearded and therefore male (example Pl. 61) or beardless (Pl. 63). They are often provided with a headdress in the current fashion as seen in the princes, courtiers and musicians depicted in metal-work of this period. The neck is
sometimes adorned with a necklace. The tail curls in an S-shaped wave downwards between the hind legs (Pl. 64).

The traditional combination of back to back winged sphinxes on either side of a stylized tree ornament was mostly used on Iranian Saljuq silk cloths. But the new form of it appears exclusively on the bronze cast mirrors. Here the tip of their wings terminate in vegetal ornament instead of the conventional scroll or tree. This is in the same fashion as the rampant pairs of lions which appear on the Achaemenid bracteate. (2)

The appearance of these patterns on Saljuq bronze mirrors cannot be merely the result of pure chance or fashion; they must have had some common associations or hidden meaning which linked them and made them, for reasons still to be explained, suitable for the decoration of mirrors. It was first introduced into Central Asia and Eastern Iran in Khurāsān. The similar composition on Chinese mirrors has probably a symbolic meaning. (3)
When the sphinxes appear in wheel patterns composed of three or four animals, according to Ettinghausen this symbolises the rising sun, the sun in the zenith and the setting sun.  

The origin and meaning of the sphinx: (1c f. pp. 98-100).

These sphinxes illustrate an artistic convention which may reflect an astrological concept, and appears on many objects from different ancient civilizations, such as: The iconographic significance of the sphinx is reasonably well established in Syria where it appears on seals (5) and may be it was attributed to a fertility goddess. Maybe in the Luristan bronzes it was associated with fertility deities. In Luristan the sphinx is given the face of a semi-human creature with a horned crown. (6)

While we are not concerned here with the ancient meaning of this theme which has been frequently dealt with by experts on Oriental art, we should study this idea in relation to Saljūq art; whether the Iranian Saljūq artists used these motifs simply as a pattern for decoration or whether they attached a meaning to these designs.
The sphinx had a certain cosmic significance in the earlier periods in Iran. However these decorations which have apparently a significance were probably not understood everywhere; possibly even the artists may not have been fully aware of the symbolic implications. In many cases they may have regarded these ornaments as traditional patterns with cosmological implications which were the proper decorations for certain pieces or functions (such as mirrors) or again certain decorative elements were brought into play by others in the scheme by way of some mental association (such as the fabulous creatures like sphinxes and harpies) especially in the society in which Sufism was widespread.
FOOTNOTES FOR MIRRORS

1- see D.Barrett, Islamic Metalwork in the British Museum, p. XI, Pl. 5a.


5- Eva Baer, Sphinxes and Harpies in Medieval Islamic Art, p.70, (1965).


8- See ccf. p. 93-4, 110-111.
CONCLUSION

The period of Iranian history covered in this discussion began with the rise of the Turkish dynasty of the Great Saljūq and was ended by the Mongol Conquest (429-550 / 1037-1220). The specific dates quoted above are only approximations for this period of art, since stylistic and thematic change do not necessarily coincide with major historical events, as the Saljūq style demonstrably continued after the fall of their empire. However, the iconography and aesthetics underwent considerable change according to the environment of its time.

The Iranian Saljūq artists invigorated the dying old traditional art of Iran and brought to the magnificent art of the great Sasanian period a new spirit that bridged the gap which had lasted nearly four hundred years between the decline of the Sasanian dynasty 226/652 and the rise of the Great Saljūqs 429/1037. It was demonstrated that Saljūq metalwork had its roots in the earlier
period and was also a revival and completion of the ancient art. It was also the beginning of the flowering of the later art. The creativity of the Iranian artists had been frustrated ever since the downfall of the Sasanian dynasty; now it was revived. The period has been aptly termed the Golden Age, for throughout these years both artists and scholars flourished. This was due to the tranquility and wealth of the age and the patronage lavished on them. All of this gave to artists, artisans and poets alike the opportunity to experiment and to demonstrate their gifts of artistic creation. The art of metalwork formed a coherent and poised style and technique and forms were developed and permanently formulated in the later periods.

The Saljuq metalwork helps to define the major characteristics of the art of the Iranian Saljuqs. Iranian Saljuq metalworkers attached importance to the development of the immensely rich resources of the Arabic inscript. They devised innumerable variations of their epigraphic bands and invented many new ways of embellishing their scripts,
beginning with the simple kufic and progressing to the more sophisticated and beautiful animated naskhi. The inscriptions on the Saljuq metalwork provides the best documented material for the history of Islamic art.

A semi-industrial manufacturing tradition continued to exist in Iran, but at this time there appeared the transformation of the everyday useful object into a work of aesthetic quality. The main centres of production were well established and the industry was organised to such a great extent that metal vessels were exported to other places. Each centre has its own individual characteristics.

As a consequence of the Mongol invasion the Iranian artisans fled westward and carried with them their technical habits and passed them on to their apprentices, thus the art influenced other schools of metalwork.
LIST OF FIGURES

69.a - Motif from bronze engraved wash basin, early 12th Cent. Iran, (see pl. 12).
   bc - Motifs from silver salver made for Alp Arslân, dated 1066/459.
   d - Motif from brass engraved candlestick, 12th Cent. Museum of Islamic Art, Cairo.

71.a - Lotus blossom from Sasanian metalwork.
   b - Lotus blossom from 12th Cent. Saljuq metalwork.
   c - Lotus blossom from silver salver, with the name of Alp Arslân, dated 459/1066.

72.a - Rosette from bronze engraved ewer, early 12th Cent, (see pl. 13).
   b - Sun motif from brass engraved wash basin, late 12th Cent, (see pl. 13).
   c - Geometrical design from brass engraved wash basin, late 12th Cent, (see pl. 14).

120.a - Motif from bronze engraved ewer, 12th Cent, Berlin Staatliche Museum.
   b - Motif from bronze mortar, 12th Cent, (see pl. 73).
   c - Motif from brass silver inlaid ewer, 12th Cent, (see pl. 25, 28).

121.a - Geometrical star motif, 12th Cent, (see pl. 75).
   b - Motif from bronze engraved ewer, 12th Cent, Berlin Staatliche Museum.

155.a - Naskhi inscription from bronze ewer, (see pl. 33).
   b - Human headed Naskhi inscription from bronze silver inlaid ewer, late 12th Cent, (see pl. 23, 24).
CATALOGUE OF THE STUDIED OBJECTS

BOOWLS

1. Silver, engraved (hammered), Sassanid, 6-5 Cent A.D. Iran, Tehran Arch. M.

2.a-b Bronze, engraved, H. 15 cm, diam. 26 cm, with benedictory inscription, late 12th Cent, Eastern Iran, Tehran Arch. M. No. 4803.

STEM BOWLS

3. Bronze, engraved, H. 12½ cm, diam. 18 cm, Khurāsān, 12 Cent, Tehran Arch. M. No. 8347.

BUCKETS


5.a-b-c Bronze, inlaid, H. 29.2 cm, with handle, diam. 21½ cm, signed Muhammad b. Naṣīr b. Muhammad al-Harrāwī, 12th Cent, Harāt; courtesy of the State Hermitage Museum Oriental Dept, No U.P. 1668.

6.-8. Bronze, inlaid, H. 19 cm, diam. 18 cm, with the 12 Zodiac figures, and benedictory inscriptions, 12th Cent, Khurāsān, courtesy of Gemeentemuseum, The Hague.
BUCKETS (CONT)

9. -Bronze, copper inlaid, H. 22 cm, D. 18 cm, with benedictory inscriptions, and 12 Zodiac signs, 12th Cent, Gurgân, Tehran Arch. M. No. 4356.

10. -Brass, carved, H. 22.5 cm, with benedictory inscriptions, late 12th Cent, N.W. Iran, courtesy of the State Hermitage Museum Oriental Dept, No. U.P. 1485.

TRAYS

11.a-b -Brass, engraved, H. 4\(\frac{1}{2}\) cm, diam. 42 cm, late 12th Cent, Khurāsān, Tehran Arch. M. No. 3485.

12. WASH BASINS

12. -Bronze, engraved, H. 3 cm, diam. 25 cm, early 12th Cent, Iran, courtesy of the Louvre Museum.

13. -Brass, engraved, H. 4 cm, diam. 23 cm, late 12th Cent, Khurāsān, Tehran Arch. M. No. 3551.

14. -Brass, engraved, H. 4 cm, diam. 25\(\frac{1}{2}\) cm, early 13th Cent, Rafsanjān, (Kermān) Tehran Archaeological M. No. 21694.

PLATE (HANA-DĀN)

15. -Bronze, engraved, with 3 animal shaped stands, H. 7 cm, D. 17\(\frac{1}{2}\) cm, with benedictory inscription, early 12th Cent, Naishāpūr, courtesy of the Sh. Jazāyery collection.

16. -Bronze, inlaid with copper, with 6 animal shaped stands, H. 9 cm, diam. 20 cm, late 11th Cent, inscription is benedictory to the owner, Khurāsān, Berlin Staatliche M. No. I. - 543.
17. -Silver, H. 25 cm, diam. 9½ cm, with Kufic inscription, 10th Cent, Tehran Arch. M.

18. -Bronze, carved, 13th Cent, Iran, courtesy of the Louvre Museum, Section des Art Musulmans, No. 7951.

19. -Bronze, inlaid, H. 32 cm, diam. 19 cm, late 11th Cent, Kufic benedictory inscription, E. Iran, Tehran Jazayeri collection.

20-21. -Bronze, engraved, H. 30 cm, diam. 9 cm, 12th Cent, Khurasan, with benedictory inscription, Tehran Arch. M. No. 3764.

22 -Bronze, silver inlaid, H. 39 cm, with benedictory inscription, late 12th Cent, Khurasan, courtesy of the State Hermitage Museum oriental Dept, No. U.P.-1436.


28-29-30 -Brass, engraved and silver inlaid, H. 28½ cm, with benedictory inscription, late 12th Cent, Khurasan, courtesy of the State Hermitage M. Oriental Dept. No. U.P.-1483.

31. -Brass, engraved and silver inlaid, H. 36½ cm, late 12th Cent, Khurasan, with benedictory inscription, courtesy of the State Hermitage M. Oriental Dept. No. U.P. - 1468.
EWERS (CONT)

32. - Bronze, engraved and silver inlaid, H. 38 cm, diam. 20 cm, late 12th Cent, Nāskhī benedictory inscription, Khurāsān, Berlin Staatlisch M. No. 1 - 3568.

33. - Bronze, with a spout, H. 24 cm, diam. 9½ cm, early 12th Cent, Khurāsān, Tehran Arch. M. No. 3459.

JUG

34. - Silver, inlaid with gold, H. 16 cm, diam 11 cm, with benedictory inscription early 13th Cent, Berlin Staatlische No. 2210.

35. - Bronze, silver inlaid, H. 15 cm, diam. 13 cm, early 13th Cent, Tehran Arch. M. No. 8500.

OIL LAMPS

36. - Bronze with four animal legs, H. 8 cm, L. 11.2 cm, Early 11th Cent, Khūzestān, Tehran Arch M. No. 8058.

37. - Bronze, shape of a mouse, H. 8.8 cm, L. 17 cm Early 11th Cent, Khurāsān, Tehran Arch M. No. 4804.

38.a - Bronze, with stand and handle, H. 14.5 cm, L. 15.5 cm, 11 Cent, Qūchān, (Khurāsān) Tehran Arch M. No. 21658.
38. b  —Bronze, with stand and handle, H. 14.5 cm, L. 15.5 cm with benedictory inscription, 12 Cent, Khurāsān, courtesy of the Moqaddam collection, Tehran.

39.  —Bronze, with handle and stand, H. 14 cm, L. 15 cm, 11 Cent, Khurāsān, courtesy of the Jazayerī Collection, Tehran.

40.  —Bronze, with stand and handle, H. 22 cm, Late 11 Cent, Louvre Museum, Paris, No. 7890.

41.  —Brass, Engraved with three legs, H. 19.5 cm, diam of top 4 cm, Khurāsān, late 12th Cent, Tehran Arch M, No. 3326.

42.  —Stand of oil lamp, bronze, engraved, with three legs, H. 44 cm, the upper part has been removed and the upper surface of the base has been covered with a sheet of metal, probably for use as a stand for an oil lamp, 12th Cent, Khurāsān, courtesy of the private collection of M. Moqaddam, Tehran.

43.  —Stand of oil lamp, bronze, engraved, 3 legs, H. 45 cm, Khurāsān, 12th Cent, courtesy of the Jazayerī Collection.
STANDS (CONT)

44. -Brass, engraved, with a flat base, H. 89.5 cm, late 13th Cent., made in N.E. Iran, courtesy of the State Hermitage Oriental Dept, No. U.P. 1449.

INCENSE BURNERS


46. -Bronze, hexagonal, H. 8 cm., D. 8 cm., with benedictory inscriptions, early 12th Cent., Tehran Arch. M. No. 3463.

47. -Bronze, in the shape of a bird, H. 11 cm., L. 12.5 cm., 12th Cent., Khurasan, Tehran Arch. M. No. 8385.

48. -Bronze, in the shape of a bird, which has benedictory inscriptions, late 12th Cent., courtesy of the Louvre Museum, Paris, No. 4044.

49. -Bronze, in the shape of a tiger, with benedictory inscriptions, late 12th Cent., Gurgan, courtesy of the Louvre Museum, Paris, (Section of Art Musulman) No. A.A. 19.

50. -Bronze, engraved and inlaid with copper, H. 45 cm, L. 41.5 cm. signed 'Ali ibn Muhammad Tākī, 12th Cent., N. Iran, courtesy of the State Hermitage Oriental Dept, No. U.P. 1565.
INK WELLS

51. Bronze, engraved, conical, H. 2.5 cm, diam. 3.5 cm, with three handles, and decorated with geometrical motifs, 11 Cent, Naishapur, Tehran Arch. M. No. 3242.

52-53. Bronze, silver inlaid, cylindrical, H. 10.5 cm, diam. 8 cm, with three handles, and benedictory Naskhī inscription, 12 Cent, East of Iran, courtesy of the Jazayeri collection, Tehran.

55. Bronze, silver inlaid, cylindrical, H. 11 cm, diam. 8 cm, with three handles, and benedictory Naskhī inscriptions, 11 Cent, Naishapur, courtesy of the Jazayeri collection, Tehran.

56-57. Bronze, silver and copper inlaid, cylindrical, H. 6 cm, diam. 8 cm, with three handles, the lid is decorated with benedictory Naskhī inscription, 12 Cent, Khurāsān, courtesy of the Brough collection, Tehran.

PEN-BOX


INKMORTARS

59. Bronze, H. 2 cm, diam. 4 cm, 12 Cent, Gurgān, Tehran Arch Museum, No. 20196.

60. Bronze, H. 3 cm, diam 5 cm, 12 Cent, Naishapur, Tehran Arch M. No. 3928.
MIRRORS

61. -Bronze, cast, 12th Cent., diam. 11 cm., with benedictory inscription, Iran, courtesy of the Foroughi Collection, Tehran.

62. -Two bronzes, cast, diam. 11 cm. benedictory inscription, 12th Cent., Iran, courtesy of the Gemeentemuseum, the Hague, No. AKI-212.

63. -Bronze, cast, 12th Cent., diam. 19½ cm., benedictory inscription, Iran, Berlin Staatlische M. No. I-2200.

CASKET

64. -Bronze, engraved, with lock, H. 12½ cm., L. 18 cm., Naskhi inscription, Late 12th Cent., Buzingerd (Hamadan), Tehran Arch. M.

MORTARS

65. -Bronze, engraved, H. 16 cm., D. 20 cm., a-b early 12th Cent., Gurgan, Tehran Arch M. No. 8494.

66. -Bronze, late 12th Cent., benedictory inscription, courtesy of the Gemeentemuseum, the Hague, No. O.M. B. 1922.

67. -Bronze, H. 19 cm., diam. 12 cm., benedictory inscription, 12th Cent., Gurgan, courtesy of the Kashan Museum, No. 20114.


ANIMAL AND BIRD STATUES

70. —Bronze, fragment in the shape of a duck, L. 4½ cm., 12th Cent., Tehran Arch. M. No. 3696.

71. —Bronze, fragment in the shape of a bird, L. 12 cm., 12th Cent., Tehran Arch. M. No. 4896.

72. —Bronze, bird statue in the shape of a partridge, H. 6 cm., 12th Cent., Gurgan, Tehran Arch. M. No. 8127.


74. —Bronze bird statue, H. 36 cm., 12th Cent., N. Iran, courtesy of the State Hermitage Oriental Dept., No. K. 3-5768.
LIST OF MUSEUMS AND PRIVATE COLLECTIONS
THE METALWORK OF WHICH HAVE BEEN STUDIED.

Benaki Museum, Athens.
Baltimore, Walters Art Gallery.
Berlin; Staatliche Museum and Historische Museum.
Bologna, Museo Civico.
Boston, Museum of Fine Arts.
British Museum.
Brummer collection.
Burney Collection.
Cairo, Museum of Islamic Art.
Cleveland Museum of Art.
Freer Gallery of Art.
Broughi Collection.
Gemeentemuseum, The Hague.
Hermitage Museum.
Jazayeri Collection.
Kelejian Collection.
Kevorkian Collection.
Kofler Collection, Lusern.
Louvre Museum.
Metropolitan Museum of Art.
Muqaddam Collection.
Musée des Arts Decoratifs, Paris.
Peytal Collection.
Sarre Collection.
Tehran, Archaeological Museum.
Victoria & Albert Museum.

Ackerman, Ph. "Textiles of the Islamic Period," Survey, vol. IV


Bahrāmī, M. Gurgān Faiences, Tehran, (1945).
-- "Atabek" E.I. 2nd ed.


Diakonov, M.M. Proceeding of the third international Congress of Iranian art and archaeology, Moscow, (1938).


-- "Manuscript illumination," Survey, vol. V.


-- "Ornamental Kufic Inscriptions on Pottery," *Survey*, vol. IV.


Ghiżalian, L.t.; "The bronze Qalamdan of 1148 in the Hermitage, collection," *A.O.*, vol. II.


"The origin and early development of floriated Kufic," *A.O.*, vol. II.

Goetz, H. "The History of Persian costume," *Survey*, vol. V.


Harari, R. "Metalwork after the early Islamic Period," *Survey*, vol. VI.


Kahn, C.H. "On Early Greek Astronomy," J.H.S. vol. XC.

Kashghari, Ma'mud. Divan Lughat-al turk, vol. I


-- Masterpieces of Persian Art, New York (1945).


Ravandi, Râhat al-Šudûr wa-Áyâtâl-Šurûr, ed. Igbâl, Muḥammad, Lyden (1921).


-- "Inlaid brasses from the workshop of Ahmad al-Dhâki al-Mawṣîlî, A.O. vol. II. (1957).


-- "Une representation de la citadelle Seljouk de merv," *A.I. vol XV-XVI*.


-- "A Saljuk silver salver" in *B.M. vol. 63*, (1933).


Witteck, G.F. "Deux chapitres de l'Histoire des turcs de Roum," *Byzantion*, vol. XI.


Zaky, Ḥassan. Al-Funūn al-Īrānīyya fi-l-ʾasr al-Īslām, Cairo (1948).
