LUSTRE IN CERAMICS

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LUSTRE IS ABOUT LIGHT. All ceramics are about light, of course. Everything is about light, for without light there could be no life. But lustre is a special case: coloured objects reflect certain wavelengths of light and absorb others, but iridescent lustre from the reduction of silver and copper responds to the totality of the light shining on it. Artificial light, especially neon strip-light, emits only a few wavelengths and lustre looks starved in it. Whereas in natural light, containing all wavelengths, it shows its harmonics and its glory. Lustre dreams of light.

Figure 1. Fragment of a bowl, original width about 14 inches (35 cm), painted in silvery-amber lustre. Egypt, 11th century. Islamic Museum, Cairo.

It is an ancient dream, much older than lustre. The metallurgists of the ancient world were expert in devising metal alloys that could shine like gold or silver, for application to wood or stone or other materials. Sometimes they were applied to glass and fixed by annealing the glass over a flame. In the reducing atmosphere of the fire. without oxygen, alloys containing silver or copper became golden or reddish-gold, as is quite often seen in glass of the late Roman Empire. The pigments were mineral forms of silver and copper and were applied by heat, in an extra firing with a smoky, reducing atmosphere. Sheens of golden, silvery or red colour developed, but more intensely than on glass because glazed ceramics are not translucent and the colour was more completely reflected. The discovery must have been exhilarating. The fragments from the 9th-10th century excavated in the 'Abbasid palace-complex of Samarra in Mesopotamia, give some idea of it. I wish I could show them in a moving film so that the changing reflections could show, for of course lustre shows itself most fully as the spectator moves even slightly from side to side. But I have to be content with the possible, and illustrate this talk with the static images.

Many of the early lustre designs were made up of cross-hatching and peacock-eyes such as are seen in Roman millefiori glass, but sometimes converted into wild, life-giving images based on fountains, vases of flowers and leaf-scrolls. The pottery painters were drawing on familiar design units but changing them into something quite new. In fact what was happening in ceramics was very new and special and its importance must have been recognised. The tiles in the Great Mosque of Kairouan, Tunisia, for instance, are believed to have been a gift from the Caliph of Baghdad when the mosque was reconstructed in the 9th century, being at that time the westernmost mosque in the Islamic world. There are about 150 big tiles,.within and around the mihrab. All the designs are different. The lustre is gentle but the tiles disclose wonderful sheens as you walk beneath them.

Starting with formalised design motifs, the painters soon began to include images. A remarkable bowl in the Ashmolean shows the transition - the old millefiori units transposed into a peacock. Many of the images are hard to interpret. Others, such as the lute player, are clearly persons connected with a festival. Other contemporary images represent warriors, courtiers, entertainers. These were rare, new ceramics, palace ceramics. They reflected light and their imagery reflected the court.

The court connection becomes clearer in Egyptian lustre made under the Fatimid dynasty from the 10th to 12th centuries. The early Egyptian lustres were silvery-green, a colour which develops at very low heat, less even than red heat. The charming figure with a stringed instrument and a wine pot obviously belongs to some kind of entertainment. *(Fig. 1)* In the Islamic Museum, Cairo, is a remarkable dish painted with a boat, perhaps referring to an entertainment on the Nile. The famous dish in the Victoria and Albert Museum painted with a priest with a censer seems to record a ceremony. The gazelles are probably emblems of good omen, like the hares and various birds that appear frequently in Egyptian lustre. The huntsman belongs to the good life of those whom fortune favours. Other pieces are painted with floriated inscriptions. They express the joyfulness of Egyptian lustre even though there is no image to give the key.

Figure 2. Bowl: Width 8 inches (20 cm), painted in golden-red lustre and dated 1211-12, Kashan, found at Gurgan, Iran. Bastan Museum, Teheran. Museum no.8224.

Something of the same mood is seen in a rare 11th century fragment of a bowl excavated at Sabra in Tunisia, and now in the museum at Raqqada. The floriated lettering is the word *okla* 'Feast'. As yet only a small number of medieval lustre pieces have been found in Tunisia, but they are historically very important because they may indicate how lustre was transmitted, much earlier than has hitherto been supposed, from the Middle East into Spain and Italy. Other pieces, datable to the 9/l0th century, have emerged from the ruins of the palace at Raqqada, just outside Kairouan. So far only 1% of this archaeological site has been excavated and its importance is hard to overestimate. The lustre bowls mortared into the walls of Italian churches in the 11th and 12th centuries are usually thought to be from Egypt or southern Spain. Some of them may well turn out to be from important and hitherto unrecorded workshops in Ifriqiya, present day Tunisia.

Before considering Spain and Italy, however, we must follow the lustre-makers East, to Persia. The well known dish in the Keir Collection, painted with a powerful image of a warrior and a leopard, follows the convention established in Egypt. The dish was in fact made in Persia, though the painters may well have come from Egypt. There were many good reasons for getting out of Cairo. The Fatimid dynasty had been on the verge of collapse for some time. The city was besieged by Saladin in 1171 and the potters' quarter at Fostat was burnt down. The court and society that appreciated luxury ceramics appears to have come to an end. The ceramics made under the succeeding Mamluks were much simpler and very little lustreware was ever again made in Egypt. But it flourished at Tell Minis in Syria and especially in Persia. Images like this, however, (I am following the authority of Dr. Oliver Watson) appear not to have been entirely to Persian taste. Something more delicate was admired, closer to the exquisite minai enamels that were being developed, with imagery and decoration based on manuscript illumination and inlaid metal. The lustre painters appear to have felt their way towards a convention that embraced the best of both worlds, the leading image and the resonating detail. The resolution appears in designs such as this, (Fig. 2) an unusually red lustre. The principal images are clearly distinguished from the decorative background, yet still one with it because they themselves incorporate decorative detail but on a smaller scale. The convention appears to have been the personal contribution of two masters in the early years of the 13th century, Abu Zeyd and Mohamed ibn Ali Tahir, whose signatures appear on a good many pieces of both lustre and minai. The designs work on four scales: the figures, the detailed background, the smaller, internal detail within the robes, and then the dish as a whole, sometimes encircled by inscriptions. Worlds within worlds.

Lustre did not appeal to the wealthy and powerful just because it was a luxury requiring skilled manufacture. Lustre, with its golden, silvery and fiery reflections, was associated with the sun, the age-old symbol of authority and power. As the sun rules the heavens, dispensing life and light, the great ruler is

the sun's earthly representative, establishing order, dispensing bounty and well-being. That is the idea behind this dish in the Ashmolean Museum, Oxford, *(Fig. 3)* showing the *diwan* theme, the ruler at ease with his companions, against a background of leaves and tendrils signifying the natural world, the whole setting being watched over by the sun itself, whose rays and face are visible at the top of the dish.

Figure 3. Large dish: Width 17 inches (42 cm), painted in iridescent golden lustre. Kashan, early 13th century. Ashmolean Museum, Oxford. Barlow Collection 1956-183.

This can be seen as an idealised version of the theme of 'the ruler at ease' but it has other connotations. The ruler is never personalised: he could be anyone who is in favour with his stars, anyone who is deeply at ease within the particular time and place. It is a universal image of well-being. But it is something more. It is also an invocation, calling upon the beneficent forces of the world for a blessing. So it is not strange that the inscriptions on lustre dishes of this kind say such thing as "May the world Creator be the Watchman, Lord of all places that are". (Note 1)

Almost incredibly, a record of the Persian lustre technique still survives. It was written in 1301 by Abu'l Qasim, who came from a family of lustre-makers in Kashan. His T*reatise on Ceramics* (Note 2) is part of a larger work dealing with perfumes, precious stones and other substances. He called it 'a kind of alchemy' because it dealt with the transformation of materials into art. He describes how to make the lustre pigment from mineral forms of iron pyrites, arsenic, iron sulphate, calcined copper and silver sulphide, ground and dissolved in vinegar or grape juice. The painted vessels are fired for 72 hours, he says, in a smoky kiln. When they have cooled they are taken out and rubbed with damp earth. "Those that have been evenly fired reflect like red gold and shine with the light of the sun". I have tried out a laboratory equivalent of his recipe. It works best at around 620°, which is highly significant. Reduction lustre is the most sensitive of all ceramic techniques and the temperature is crucial. How did people judge it? It is no accident that 620° is the temperature at which a kiln first begins to glow with heat. The potters could recognise the right temperature by eye, – a neat technology!

Persian society was overwhelmed by the Mongol invaders in the 1220s. Kashan survived but many cities were destroyed for ever. Virtually no luxury ceramics were made for over a generation and though lustre was made again under the Il Khanids, the golden age was gone. Despite its charm, the work lacked the poetic dimension of what had gone before. Tiles were now far the most important part of lustre production, especially for Shiite shrines and tombs, beautiful wall-tiles and magnificent architectural compositions intended to lift the heart and look into eternity.

Little lustre was made in Persia after the mid 14th century except for the curious revival of lustre in a very different manner under the Safavids in the later 17th century. It was very different indeed – a dense vitreous clay body covered with white, blue or sometimes yellow glazes with an incredibly high gloss and red, golden or silvery lustres of stupefying brilliance, with dreamlike images of birds and animals, trees and plants suggesting a miniature ceramic tapestry. These lustres, attributed to Kirman, appear to be ceramic translations of fabric designs, silks and carpets perhaps. A beautiful but historically mysterious phenomenon, quite different from all other lustres.

Westwards again, to Tunisia and beyond. If you recall the fragment of the large, golden, inscribed bowl from Sabra, you will see that it has something in common with some of the earliest known lustre made in Moorish Spain. There are references in Al Edrisi and other writings to lustre being made in Spain in the 12th century, but until recently no actual examples were known. An important dish, now in the Museo historico, Murcia, was excavated from the ruins of a Moorish house of the early 12th century. Archaeologists believe it was made locally. If so, it is over a hundred years earlier than any other Spanish lustre so far known.

Lustre was certainly being made in the Nasrid kingdom of Granada, at Malaga and perhaps at Granada itself by the early 14th century and probably before. The magnificent ship bowl in the Victoria and Albert Museum belongs to a later stage of this tradition, probably around 1400. It was a popular theme; fragments of other lustre ship bowls have been excavated at Malaga and blue and white ship bowls have been found in the ruins of the Kasbah in Tunis, but this great bowl is of a different order: it lifts a popular image into poetry.

Figure 4. Dish: Width 15 inches (37 cm), painted in cobalt blue and golden-amber lustre. Manises, Valencia, early 15th century. Museo Arqueologico, Madrid.

A fragment, also in the Victoria and Albert Museum, shows the blazon of the Nasrids, the rulers of Granada, for whom the most famous of all lustres were made, the great vases. The vase in the Hermitage Collection in at Petersburg is perhaps the grandest of them all. It has a floriated kufic inscription round the middle repeating the word *al-afiya* (blessing). Both handles are still intact and the designs include the *khams* symbol (the hand) with eyes. The gazelle vase, still in the Alhambra itself, is probably the best known and the most appealing. These great vases are invocations. The form derives from the traditional *tinaja* for storing water, forms that were often decorated with sacred symbols, for water is sacred. But here the vessel form, almost as high as a man, has been refined and elaborated to become itself a symbol, and is a treasury of sacred emblems, the gazelles, the hand of Fatima, trees of life and interlacing knots with no beginning and no end, signs of eternity. Here is a translation of an inscription over an alcove where one of the jars used to stand (Note 3):

> By the sun and its rising brightness; by the moon when she followeth him; by the day when he showeth its splendour; by the night when it covereth him with darkness; by the heaven and Him who built it, by the earth and Him who spread it forth; by the soul of Him who completely formed it, – wherever you are, *there* is the One supreme Lord of All.

This dish (Fig. 4) comes from Manises, on the edge of Valencia, to which many of the Moorish potters emigrated in the 14th/ 15th century, taking their technical tradition with them. The double palmette trees of life in each of the four quadrants of alternating blue and lustre occur fairly frequently in Islamic art, but it's worth taking time and looking at them closely. They are not quite the same in the 'male' panels of blue on white and the 'female' panels of white on lustre. The scrolls of the wide, lower palmettes are really rather different. So are those 'wings' which point inwards towards the centre. The apparent repetition contains many variations: the upper and lower palmettes look at first like mirror-images but are in fact very different…Where does the design begin or end? Because of the four-part composition it looks static at first, but as your eye explores it you see it consists of scrolls and curving tendrils which move from the blue to the lustre panels in a sweeping rhythm. It is one entire design, not a repetition of four units. The movement is punctuated at certain points by swellings and clusters like fruit or berries. It incorporates halts, points of tension and crossings. And some of the movement looks inwards towards the centre, like the lower wings, but in the upper corners it looks outwards towards the flow of the border…Finally, the background to the blue design is not white but laced all over with tiny spirals drawn in lustre. Everything is in stately movement.

The Moorish potters at Manises had a repertoire of extraordinary richness to draw from in the work they did for their Christian overlords. They used a little here, a little there, on jars for pharmacies, some of them monumentally grand although they were supposedly functional pieces, on superb *braseros,* on vases and tall pitchers, on the small 'eared' bowl, the *cuenco de orejas* and other popular pieces. We know them best for the great armorial pieces such as the plate with the arms of Maria of Castile, about 1425, now at Sèvres and for the superb eagles and other designs on the backs. The lions, eagles, bulls and others

eventually escaped from the heraldic context and reappeared slightly later in their own right, free-drawn, decorative emblems, sometimes with deliberate or casual fantasy and humour. We should not forget either the later pieces, usually lighter in touch, such as the birds from Muel and excited bulls from Catalonia, found amongst the work of the late 16th century.

The technology and the spirit of Hispano-Moresque lustre lay with the Moorish artisans. When the Moorish population was expelled from Spain in 1609, in a preview of what is now termed 'ethnic cleansing', the effect on the art of lustre was immediately apparent. It lost its harmonics. It became increasingly secularised. To save expense, less silver was used and the lustre lost much of its iridescence. Most of the later Spanish lustre is a plain copper red, sometimes grand but seldom magical. The popular bird theme used in Manises or Reus in the 17th century has a certain charm, but it is lightweight compared with what had gone before.

Lustre continued to be made in Spain up to the end of the 18th century. In the 1780s king Carlos III attempted to revive the industry, which was then acknowledged to be in decline. An unusual plate, now in the Museum at Sèvres, appears to belong to that late phase, and can be taken to stand for a number of puzzling late pieces of Spanish lustre that have no apparent relation to the old Hispano-Moresque tradition. A more active revival began in the late 19th century around Manises, where simple wares in the style of older lustre are still made.

The great age of Hispano-Moresque lustre was undoubtedly the 15th century. A lucrative trade was promoted by the Buyl family of Valencia, who supplied armorial dishes and other pieces to many of the noble families of Spain, France and Italy. Lustreware – *obra de Malequa* as it was usually termed – is often mentioned in inventories and even modest pieces were considered to be of some importance. Not surprisingly, Italian potters were eager to learn how it was made. An interesting half-way stage occurred around 1450. Vessels were produced with designs derived from lustre but painted with orange-yellow as a substitute for the golden sheen. A similar substitution is found at an earlier date in Tunisian tin-glaze wares, where a purple-brown manganese pigment was used as an equivalent for the lustre.

Figure 5. Large dish: Width about 17 inches (44 cm), painted in cobalt blue and golden lustre. Deruta, c.1520. Museo Civico, Pesaro. Inv.167.

The potteries famed for lustre were above all those of Deruta and Gubbio in Umbria, where lustre was probably being made by the 1480s, certainly by the 1490s. As always, beginnings are hard to trace: there is some evidence that lustre was being made earlier in Faenza and possibly also in Pavia and Pesaro. It was also made early in the 16th century at Cafaggiolo. Lustre obviously excited a widespread interest, but it was made in quantity only at Deruta and Gubbio. Deruta was known especially for designs painted in yellow-gold and blue and Gubbio for ruby-red, though in fact both places were capable of producing silver, golden and red lustres. The blue was painted on the glaze while it was still powdery, before being fired. In the firing it penetrated the glaze and became fixed. The lustre pigment, made from compounds of silver and copper mixed with red ochre, was painted afterwards on the glossy, fired glaze, and was fixed to it by refiring the piece at a lower temperature in a smoky atmosphere. In the Museo delle Ceramiche at Faenza is an intriguing Deruta waster. It must have cracked in the glaze firing after being delicately painted with the head and shoulders of a young woman, and it was later used as a trial piece to test the development of the lustre, which is painted over it with a broad brush (Note 4). One can see the lady as she was intended to be in this fine betrothal dish *(Fig. 5),* a Deruta speciality, which for reasons explained in my book (Note 5) I think is from drawings by Pinturicchio. At the other end of the scale is a little dish, now in the Museo Communale Deruta, made for pilgrims to nearby Assisi (Note 6). It has been put together from several originals, something that was only possible because the design was so faithfully repeated over and over again. It is painted in the typical yellow-gold and blue which gives Deruta wares a particularly happy mood, summer-sky and sun. I think this was deliberate: it is an invocation to the benign forces of the world, done for the same reasons as in the gazelle vase in the Alhambra.

Figure 6. Plate: Width 11 inches (27.5 cm), Salome before Herod, painted in tones of colour on white tin glaze with lustre 'finishing'. Gubbio, dated 1526. Ashmolean Museum, Oxford. Cat no.11.

Maestro Giorgio's famous lustres at Gubbio have a very different mood, grand and much more worldly. Judging by his habit of signing his work, he had a strongly developed sense of P.R. and he certainly made himself the most famous individual in the history of lustre. By contrast, in the whole of Hispano-Moresque lustre not a single signed piece is known. I think Maestro Giorgio did much to establish the mystique of lustre, and I am sure it benefitted his trade. Piccolpasso, writing his *Three Books of the Potter's Art* in 1557, consulted Giorgio's son Vincenzo, then working at Urbino, and was impressed by what I suspect was the customary spiel:

> Many… make the kilns on the floors of houses which are locked and under close guard, for they look on the manner of making the kiln as an important secret and they say that in this consists the whole art… It must be known that these kilns are always made small, as one might say three feet on all sides, or else four, and this comes about because the art is treacherous, for oft times of 100 pieces of ware tried in the fire, scarce six are good. (Note 7)

Piccolpasso's book includes a drawing of a lustre kiln in action, showing the fuel, fire and smoke, and a lad trying to extract a trial piece from the vent in the vault, a tricky business, though I doubt if the boy would have done it stark naked, as Piccolpasso shows him.

One of Maestro Giorgio's specialities was 'finishing' with lustre, that is, adding lustre to maiolica pieces that had already been painted and fired. One of the motives was that there was no way of getting a really strong red except from copper lustre, and red was highly desirable for the robes of heroes and warriors, and for blood. 'Finishing' must have been a nerve-racking business. Weeks of work had already gone into some of these pieces, and large plates, especially, were liable to crack when reheated. *(Fig. 6)* Pieces 'finished' with lustre carried considerable prestige and many are inscribed on the back 'Maestro Giorgio fini de maiolica', *maiolica* being the current name for lustre. Aesthetically, the results were questionable. The main problem was that figurative *istoriato* painting on maiolica was done with careful tonal rendering of three-dimensional effects. The flat reflections of lustre do not easily agree with modelled drawing or painting in tones of colour, an Italian speciality, and the lustre sheen sometimes appears to jump clear of the in-glaze colours. This may expain why, although lustre was admired, it was not regularly produced in major pottery centres such as Faenza, Florence, and Venice, but only in two small towns in Umbria.

Lustre was revived in Italy around 1850, partly as a result of English and other collectors buying up all the best maiolica they could get. People suddenly realised that there was money to be made in ceramics after all. One of the foremost lustre painters in the later 19th century was Pietro Rubboli, whose descendants are still working in lustre at Gualdo Tadino. Wisely, he used the copper red and silver yellow lustre as flat infill of spaces left specially in the maiolica painting.

In the 1860s another revivalist, Pietro Gai, was consulted by Clement Wedgwood, who was considering adding reduction lustre to the Wedgwood factory repertoire. Wedgwood and his colleague Emile Lessore fired their test kilns enthusiastically, exchanging encouraging comments when either of them achieved any kind of coloured stain that could be taken for lustre, but none of Pietro Gai's recipes seemed to work properly in England and they eventually recognised that this ceramic technique was, as Piccolpasso had said, 'treacherous' and far too variable for industrial production. It was attractive to artist potters for precisely that reason. It had an aesthetic potential which no-one else could follow up. A number of people adopted it at almost exactly the same time, Kahler in Denmark, Massier in France, Szolnay in Hungary and De Morgan in England. Each felt he was following his star and I doubt if they knew of each other, but the coincidence makes one wonder, how much are peoples' motivations really their own, and how much are they expressions of a spirit already in the air?

Figure 7. Wide jar with golden, amber and red lustre decoration, by Sutton Taylor, 1995.

Their work was in fact very different: Clement Massier conducted a vast range of innovative experiments. Everything he did in lustre with lyrical plays of light was deliberate, never just for the sake of experiment. He ran a profitable business at Golf Juan and employed a good many artisans, but he kept the lustre work in his own hands. Vilmos Szolnay, produced inventive *jugendstil* designs and had amazing mastery of an even wider range of techniques, but much of his work seems to me contrived, despite the drama. William de Morgan's lecture to the Society of Arts in 1896 describes his technical struggles. Modestly, he did not mention his mathematical and engineering abilities. In the end he could do almost anything he chose and he discovered how to employ lustre colours in varied tones. Tone in lustre is very difficult to control; it was one of de Morgan's many original discoveries. De Morgan seldom if ever made or painted anything himself. He was first and foremost a designer. That was his strength and also, I think, his weakness.

Pilkington's Royal Lancastrian Pottery assembled a team which collectively covered all the necessary skills, ceramic engineers, artisans and designers amongst whom were Walter Crane, Lewis Day and Gordon Forsyth, under the direction of the brilliant ceramic chemist William Burton. They began working in lustre in 1903. In the years before and a little after the first World War they produced many exceptional art pieces. It was a supremely gifted team enterprise. They had everything that was necessary, design, technology, markets, but I do not find in their work the almost mystical commitment that animates individuals who follow their star, suffering disasters and rising again from the ashes.

It is not possible to do justice to everyone, the Cantagalli workshops in Florence, or Ricardo Gatti and Pietro Melandri of Faenza, the Serra family of Barcelona, the Ros family of Benicalap, Valencia, Cris Lanooy in Holland, for example, all active in the first third of this century. I must be content to end with a few references to work in lustre that has, for various reasons, come close to me.

First I would like to honour the memory of my Egyptian friend Said El Sadr, who worked in Cairo until his death five years ago, and who is commemorated in a chapter of my recent book (Note 8). He was an all-round artist, dynamic and inspiring, and an impetuous experimenter, about as opposite as can be to Burton's team at Royal Lancastrian. Lustre magnetised him. One of his original techniques that most pleased him was the production of red lustre on a turquoise glaze ground. The vessels were first reduced overall to copper red. The designs were then painted with hot wax and the pieces were dipped in hydrofluoric acid (wildly dangerous). The glaze was etched away, leaving the designs standing out in the original red lustre.

Alan Peascod, from Australia, says he became fascinated by lustre as a result of visiting me. Almost immediately he disappeared to Egypt and spent a year working with El Sadr, learning about lustre and also absorbing many of the techniques and forms of the local artisans, reappraising them as non-functional vessels equivalent to sculpture.

Sutton Taylor makes lustre in Yorkshire, as he modestly puts it, "lurching from disaster to disaster" in his firings, but periodically exhibiting pieces with astonishing interplay of light and colour. His work is instantly recognisable *(Fig. 7)*. This piece invites comparison with Yeats, whose poetry is studded with images evoking lustre:

These are the clouds about the fallen sun
The majesty that shuts his burning eye…

Many people attempt reduction lustre and give it up when the going gets hard. Sutton Taylor and I are amongst those few who have carried on regardless for much of their working life, simply because (like El Sadr too) lustre will not let us go.

Like my three friends, I have had to find my own way. The chemistry of lustre is clear enough in principle, but in practice it is always confused by a large number of variables such as the size of the kiln, the type of fuel, the composition of glazes, the duration of the firing, and by the weather. In Piccolpasso's day they said that lustre should be fired only at certain phases of the moon. In the past, people took care to follow the rules. Hispano-Moresque lustre suffered occasional disasters, as the kiln-wasters show, but it remained amazingly consistent for some two hundred years by keeping to well proven technical procedures. But you can only follow the rules if you know what they are. By the late 18th century they had been lost and since then everyone has had to find out for themselves how best to work in their own context. De Morgan said he had rediscovered the technique. He hadn't, of course. He wasn't trying to remake Hispano-Moresque or Gubbio lustre. He was trying to do his own thing. He was discovering how to make lustre in his own coal-fired kilns with the available materials. No-one since then has worked in quite the same way. We have all had to find our own and by a mixture of choice and accident, we have arrived at our own versions of lustre.

Figure 8. Plate with broad rim: 14 inches (35 cm) wide. Shadrach, Meshak and Abed Nego painted in copper red, silvery amber and golden lustre on tin glaze. Alan Caiger-Smith 1994.

For me, a new and unexpected quality arose from the vapouring effects produced by silver pigments in my large wood-fired kiln. To my mind they add something important. The calligraphic brushstrokes are edged and clouded by the vapour eddying in the draught of the flame and it can give them a strange illusion of depth. I cannot fully control it, but I can encourage it to happen. However, I end this talk with something very different, a dish painted with Shadrach, Meshak and Abed Nego in the burning fiery furnace, where instead of being destroyed, they were transformed (Fig. 8). Only after this piece was completed did I see the connection between the story and the suspense and drama of the lustre firing.

NOTES

1. From Ernst J. Grube, *Islamic Pottery of the Eighth to the Fifteenth Centuries in the Keir Collection*. London 1976, p.221.
2. Abu'l Qasim's *Treatise on Ceramics* ed. J.W. Allan, 'Iran' Vol XI, 1973, pp.111-120.
3. From M.J. Goury and Owen Jones, *Plans, Elevations, Sections and Details of the Alhambra*. 1842.
4. Alan Caiger-Smith, *Lustre Pottery,* London 1985, colour pl.XXII.
5. *Ibid.,* pp.129-132.
6. *Ibid.,* colour pl.XXIV.
7. Piccolpasso's *Three Books of the Potter's Art* ed. R. Lightbown and Alan Caiger-Smith, London 1980, Vol.II, p.90.
8. Alan Caiger-Smith, *Pottery, People and Time*, Richard Dennis Publications, Shepton Beauchamp, 1995.