Dr Hemer, who has long been interested in this fascinating magic square, comments on its recent discovery in Manchester and on its probable Christian origin.

A wet afternoon at a muddy redevelopment site in the heart of Manchester hardly seems a plausible setting for an archaeological discovery of potential importance for the early history of Christianity. There are, as we shall see, tantalizing problems of interpretation which make it premature to build too much on debatable possibilities. But the find may prove to throw light on questions of far-reaching significance, and we await with the keenest interest the results of tests currently being carried out.

A worker at a rescue dig off Deansgate, Manchester, at the end of June 1978, unearthed a large sherd of coarse Roman pottery, measuring some seven inches by three and a half, caked with mud, but bearing traces of large lettering scratched on its surface. After cleaning, the word OPERA appeared clearly across the centre of the surface, and above it the word ROTAS, broken at the top but clearly enough legible. A third line was fragmentary, preserving only the upper parts of five letters which may be restored as TENET.

This peculiar sequence of letters is sufficient to permit recognition of the well-known "magic square" whose complete form reads:

\[
\begin{array}{c}
\text{ROTAS} \\
\text{OPERA} \\
\text{TENET} \\
\text{AREPO} \\
\text{SATOR}
\end{array}
\]
The letters of this square read alike forwards or backwards, up or down. Apart from the sequence AREPO, the lines all read as intelligible Latin words, and the whole may at a pinch be translated as a meaningful sentence: "Arepo the sower (sator) holds (tenet) the wheels (rotas) with care (opera)".

The problem of interpretation of this cryptic graffito is itself a fascinating story extending over more than a century. The square had in fact long been known as a mediaeval Christian symbol, often used as a talisman or amulet. But its origin and significance were unknown. Then in 1868 an example was found scratched on wall-plaster from a Romano-British excavation at Cirencester. This find was long disputed and discounted as a possible mediaeval intrusion. As archaeological techniques of the day were undeveloped, the doubt persisted. In the 1920s three scholars offered independently, with minor variations, an explanation of the Christian meaning now recognised as having been attached to the square from about the 8th century. The twenty-five letters could be rearranged to make the words Pater noster ("Our Father") written crosswise, with the additional letters A and O, standing for "Alpha" and "Omega", "the first and the last" (cf. Rev. 1:11; 21:6), twice each:

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P
A
T
E
O
R
P
A
T
E
R
N
O
S
T
E
R
P
A
T
E
R
N
O
S
T
E
R

In 1931-2 four new examples of the square were found during the excavation of Dura-Europus on the Euphrates. These were of undoubtedly Roman date, of the mid third century, before the destruction of the city. Dura-Europus was an early Christian centre, and the discovery confirmed that the hypothesis of a Christian origin for the square might be carried back into the Roman period. It also corroborated the Roman provenance of the old Cirencester find, of perhaps the fourth century. The Christian view won wide acceptance, and the case seemed essentially closed.
The consensus was a brief duration. In 1936 a specimen of the square was found in a very surprising place, in the Palaestra near the amphitheatre at Pompeii. But Pompeii was overwhelmed and sealed off by volcanic ash on 24 August A.D.79. In fact there were two specimens there: a previously published scrap of graffito was now recognised as a fragment of another square. These finds raised grave doubts about the Christian interpretation: it was questioned whether there could have been Christians in Pompeii, and, if so, whether they could conceivably have used a kind of cryptic symbolism unparalleled until much later. And there were other complications. It was argued that the Palaestra square must be even earlier: it was associated with graffiti thought to antedate the earthquake of A.D.63. It is true that other evidences have been offered for the presence of Christianity in Pompeii and Herculaneum before their destruction, but these are highly dubious. Many scholars have felt that the date is impossibly early for the Christian view, and have sought other explanations.

One suggestion was that the graffiti were the work of later explorers of the ruins: but it was shown that the covering debris had lain undisturbed since A.D.79. Others have offered alternative theories of the origin of the square: that it was Jewish, or Mithraic, or Orphic, or connected with local Italian cult, or merely a verbal curiosity whose anagrammatic properties were accidental and without religious or other significance. There is of course no dispute that it was a Christian emblem later, that Christians adopted it if they did not originate it, presumably because they anticipated modern scholars in seeing "Pater noster", "Alpha", "Omega", and the cross. But the real question is that of origin: did Christians think of encoding their beliefs into this cryptic form, or did they merely take over a pre-existing device of alien origin which just happened to be singularly adaptable to their use, and, if so, when?

The very few subsequent finds have done little to clarify the elements of the problem. To date only about ten examples of the square have come to light from the Roman period, from places widely scattered round the limits of the Empire. So the Manchester discovery is of great importance, and anything we can learn of its context will be worth careful weighing. The indications are that it is actually the earliest known specimen apart from the two from Pompeii. Professor Barri Jones, Professor of Archaeology at Manchester University, who has directed the excavation, is confident in assigning it to the later second century, about ± A.D.185, from the convergence of different lines of archaeological evidence. But the square is scratched on a sherd.
of what can only have been an amphora, a heavy storage jar of coarse ware, probably imported from somewhere in the Mediterranean area. The graffito seems to have been added later, whether on the intact vessel or an already broken sherd. In any case there is no means of telling whether the square originated in Manchester, or was brought from elsewhere. The site belonged to an area of civilian settlement adjoining the Roman fort of Mamucium, but there is nothing apparent in this context which seems likely to throw specific light on the interpretation of the square. We may perhaps hope for more details than are yet available, but for all the excellence of modern techniques some uncertainties of the case are likely to prove insoluble.

It may still be debated whether the squares at Pompeii (or at Manchester) are really yet valid evidences of Christianity at all. The crucial question of the origin of the thing remains. Here I offer a personal opinion for what it is worth. I hope to publish elsewhere later the more technical reasoning on which this judgment is based. It involves a curiously intricate study in the evaluation of coincidence and of linguistic and constructional probability, complicated by the need to strike the right balance in the difficult historical questions. It is a problem to separate the original and essential from the secondary and coincidental. The complexion of the study seems to shift surprisingly under the attempt to explore the possibilities thoroughly. One factor is the peculiar limitation imposed on the construction of such a square by the word-pattern of the Latin language. Thus AREPO is there simply as a reversal of OPERA. Attempts to answer the question of origin by finding an esoteric meaning in it are, I think, beside the point. There is certainly a secondary tradition of the interpretation of AREPO, but only, I think, secondary. It will not help in the crucial question of origin.

It seems strongly probable, all things considered, that the inventor of the square already had the words "Pater noster" in mind, and was prompted by them to hit upon this very ingenious way of encoding them into a cryptic anagram. There are difficulties in the way of supposing that a square could have been composed ex nihilo in a form which lent itself to this particular coincidence. It may still be argued that the words "Pater noster" are not necessarily exclusive to Christians, but that Jews, for instance, might have used them. This may be true, but only Christians, I think, are likely to have found a fundamental and formative motif in them (Matt. 6:9; cf. Rom. 8:14 ff; Gal. 4:6 f). In fact the non-Christian views seem plausible only if the Christian may be excluded. It all comes back again to the difficulty in the
early date of Pompeii. Apart from reservations prompted by this, the Christian view would probably still command wide acceptance, even if for differing and sometimes incompatible reasons.

We cannot claim to prove that there were Christians in Pompeii, but I do not think it unlikely. According to Acts 28:14 there were Christians at nearby Puteoli (Pozzuoli) when Paul landed there, probably in 60. It would not be surprising if there were others at Pompeii then or a few years later. There seem to be good grounds for supposing that there was actually an earlier, swifter and more widespread expansion and development of primitive Christianity than our fragmentary sources can specify or than some scholars accept. Their scepticism is perhaps carried over in part from older assumptions and does less than justice to the evidence of the New Testament documents themselves. It is still a very surprising thing, which seems almost too good to be true, if we really have evidence in the square for a Christian presence in Pompeii. On balance I think we probably have. The square is best explained as of Christian origin, and Christianity in Pompeii is not improbable. The two aspects may be held together and even corroborate each other. The difficulties may be explained in this context: the early use of Latin by Christians, for instance, is not the problem often supposed, for Christianity was essentially a vernacular and evangelistic movement which probably began to use Latin as soon as it extended from the East into a Latin-speaking environment. It is well to be aware of the diversity of possibilities and the fragmentary character of our surviving knowledge of the first two Christian centuries. We need to recognise our limitation of perspective and to be wary of stereotyped impressions based on arguments from silence.

This brief account must inevitably omit discussion of many issues which belong to a fuller study. Such include questions of the precise status of the "Alpha" and "Omega" motifs, usually derived from the Revelation, and of the cross symbolism. The probable answers do not invalidate, and may confirm, the view taken here.