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The Cirencester Word-square

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THE CIRENCESTER WORD-SQUARE*

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THE fragment of wall plaster bearing the inscription which is the subject of this paper was found in 1868 during excavations in what was then the New Road and is now Victoria Road, presumably near its southern end, since it is described as having been found in Watermoor. It is briefly described in a paper in this Journal written twenty years ago by Mr E. C. Sewell, long the Curator of the Corinium Museum, who as a boy had been present at the discovery sixty-eight years earlier. His account completely refutes the view expressed by some medieval scholars that the inscription is a modern forgery, and as we shall see, their alternative view that it is of medieval date is equally false.

The word-square, of which the inscription scratched in the plaster consists, occurs in two forms

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

Form I

Fig. 1

Form II

For more than sixty years the Cirencester Square was the only known example of Form I and in fact it aroused little interest in England or abroad. The earliest known example of

*This paper is based on two previous ones (a) 'The Sator-Formula and the Beginnings of Christianity,' *Bulletin of the John Rylands Library* 22 (1938), and (b) 'The Origin and Date of the "Sator" Word-square,' *Journal of Ecclesiastical History* 2 (1951). I am indebted to the Editors of these Journals for permission to make use of them. Bibliographies will be found in these and more elaborately in H. Fuchs 'Die Herkunft Der Satorformel'. *Schweizerische Archiv für Volks Kunde* 41 (1951).

Form II is in an Egyptian papyrus of the late 4th or early 5th century A.D. and the widespread occurrence of it in late antiquity and the middle ages is well attested. Thus in Ethiopia in the 6th century the five words, much corrupted (Sador, Alador, Danet, Adera, Rodas), were used as the names of the five nails of the Cross. Its use as a charm may be illustrated by a passage in a 16th-century writer who described how a citizen of Lyons was cured of insanity by consuming three crusts of bread each inscribed with the square interspersed between five recitations of the Paternoster in remembrance of the five wounds of Christ, and the five nails. In South America in the 19th century it was used as a charm against snake bites, and to help in childbirth.

Naturally so remarkable a construction and so powerful a charm has been the object of much study and numerous attempts have been made to extract some meaning from it beyond what is superficially apparent. The translation of the words commonly adopted has been of this kind. The Sower Arepo (supposedly a proper name) holds the wheels carefully (or with might and main), taking *opera* to be the ablative singular of *opera* not the accusative plural of *opus*, and indeed to suppose the latter would impute very imperfect latinity to the composer of the square. The word arepo in spite of attempts to connect it with *arripere* (rapere) 'seizes' or *adrepere* 'creeps up to, or behind' is now generally accepted as a non-Latin word. But some scholars still regard it as Celtic, and so connect the square with an origin in Gaul. This is based on a word *arepennis* (or *arapennis*) which is said by a 1st-century writer to be used in Gaul to mean half-an-acre (*semi-iugerum*). But a later writer of Spanish origin attests its use also in South-west Spain, and there is in fact no real reason to regard it as Celtic at all. In a late Greek MS of the Bible there is, as a marginal note, a Greek translation of the square, 'The Sower has the plough, works, wheels.' And this has been taken to prove that arepo means a plough—an instrument said by the elder Pliny to have been fitted with wheels in Gaul. But the translator into Greek will be seen to have an imperfect knowledge of

Latin, and his translation 'plough' (*arotron*) is more likely to depend on the identity of the first two letters than on a knowledge of Celtic. Recently a most distinguished French scholar of Celtic has suggested a connection with a root suggesting a meaning like headland, *i.e.* the top of the field where the plough turns round. But it is hard to see how this can be made to fit the rest of the sentence.

The square has been regarded as a palindrome similar (though more elaborate) to the well known 'Able was I ere I saw Elba' or *Roma tibi subito motibus ibit Amor*. Thus in Form II by starting at the top left hand corner and going as far as the central N, or starting at the bottom right hand corner to the same point we read '*Sat orare poten*' which may be translated 'Are you able (*poten=potesne*) to pray enough (*sat=satis*) and the former abbreviation does actually occur in colloquial Latin in Plautus.

Or again by rearranging the twenty-five letters new and more significant statements have been sought. One of the most ingenious—the invention of a German—runs *Petro et reo patet rosa Sarona* 'the rose of Sharon stands open for Peter guilty though he be'. In the middle twenties of this century however it was observed by more than one Continental scholar, Frank in 1924, Grosser in 1926, Agrell in 1927 that the twenty-five letters could be re-arranged into two repetitions of the words *Pater noster*, necessarily set in the form of a cross, since there is only a single N, and there remain two A's and two O's. A natural conclusion from this striking fact is that the square is a re-arrangement of what was originally a Christian amulet, consisting of the Latin title of the Lord's Prayer in the form of a Cross, flanked in some way by the Latin form of the Alpha and Omega familiar from three passages in the Revelation of St. John (I, 8; XXI, 6; XXII, 13) 'I am Alpha and Omega, the beginning and the end.'

It is evident that this interpretation of the square is not susceptible of complete proof. If it is to be accepted it must be on account of its inherent plausibility. It is possible to argue

that the combination of letters is coincidental. But my mathematical friends tell me that on the theory of probability the chances against such a coincidence are very high indeed.

And it may be remarked here that the strength of the suggestion lies in the triple elements of significance, the name of the Prayer, the Alphas and Omegas and the arrangement as a Cross.

Further subsidiary indications pointing in the same direction will be noticed later.

Grosser like the other scholars was unaware of the Cirencester example, and it is interesting that he prophesied that the square would eventually be found in Roman surroundings.

His prophecy was fulfilled within a few years though in Form I which he did not know. In 1931-2 excavations were being carried on by a combined French and American expedition at Dura (a town on the Euphrates) founded about 300 B.C. by a Macedonian successor of Alexander, a part of the Parthian Kingdom from c. 150 B.C. to A.D. 164, then under Roman control till its destruction by the Persians in A.D. 256. Here no less than four examples of the square in Form I were found in circumstances which connected them with the Roman garrison, and dated them to c. A.D. 200-220. These discoveries were received with great enthusiasm by a wide circle of scholars concerned with the early history of Christianity, and there was almost—but not quite—universal agreement in accepting Grosser's account of the origin of the square as an ingenious device by which Christians would be enabled to recognize their co-religionists, while pagans would regard the amulet as merely a piece of magic at a time when, as numerous finds from Egypt and elsewhere reveal, it was widely believed that the processes of nature could be influenced by such combinations of words and syllables.

It was pointed out that slight modifications of the calligraphy of the square would enhance its effect. Thus the T's (themselves an early form of the Cross) lie at the ends of an inscribed Cross and with the A's and O's might be slightly emphasized to give a veiled hint of the Christian significance of the square in the

same way as on Christian tombstones of the 3rd century in Asia Minor the Greek letter X is represented as an equal-armed cross.

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

Fig. 2

But in 1937 a complete example of the square (again in Form I as in the Cirencester example) was published, having been found the previous year at Pompeii, and strangely enough this was not the first example found there. An incomplete example was discovered in 1925 and published in 1929 without its nature being recognized by its publisher—or apparently anyone else.

These discoveries, perhaps rather surprisingly, caused something like consternation among the scholars concerned with these studies and with the beginnings of Christianity, and those who had written articles accepting the Dura examples as convincing proof of the Christian origin of the square now made haste to argue that this was impossible, and in a year or so the accepted view among most scholars attributed a non-Christian Jewish origin to the square.

The objections to a Christian origin are (1) the improbability of the presence of Christians at Pompeii before its destruction in A.D. 79; (2) the implication that Latin was familiarly used among Christians at so early a date, since all the evidence asserts the exclusive use of Greek for teaching and liturgy (except of course in Palestine) before the beginning of the 3rd century; (3) the use of A and Ω (in a Latin form) to symbolize God or Christ at a time anterior to the Apocalypse in which the symbolism first appears; (4) the recognition of the Cross as

a well-known Christian symbol and its identification with the Latin form of the Greek Tau which is first found in a symbolic use in the Epistle of Barnabas (a work not earlier than the 2nd century); and in general the symbol of the Cross appears gradually and at a late date in Christian iconography so that its use as a prophylactic so early is held to be extremely unlikely; (5) the concealment of Christian symbols by means of cryptograms has been thought to appear first in the 3rd century and as a result of persecution.

It will be observed that if the square is of Jewish origin it will have been composed by a Jew for a community with a knowledge of Latin (hence presumably domiciled in the western half of the Roman Empire). The capture of Jerusalem by Pompey in 63 B.C. brought large numbers of Palestinian Jews to Rome as captives and there is good evidence for a considerable Jewish population in Rome and other Italian towns from the time of Augustus onwards.

The hypothesis of the Jewish origin has been supported by reference to visions described in the Book of Ezekiel (I, 14-17; IX, 1-6; X, 1-2): in a series of visions the prophet saw living creatures with four faces and associated with them wheels, one for each of the faces, and the wheels 'went upon (or towards) their four sides; later after a siege of Jerusalem has been prepared there appears a man clothed in linen with a writer's ink-horn at his side, who is instructed to mark with the Thau the foreheads of the faithful, while his six companions are to slay utterly the old men, the young men and maidens and little children but are not "to come near any man on whom is the mark." Then fire is to be taken from between the cherubim above the whirling wheels and to be scattered over the city which is to be completely destroyed.' Then there follows a more elaborate description of the chariot—or rather moving throne. The letter Thau—the last letter of the Hebrew alphabet is generally used in Jewish symbolism to signify the Torah—the body of Jewish law and the sacred scrolls in which it is preserved, so that neither its position in the alphabet nor its shape which has been asserted to take the form of a + or × has any significance in Ezekiel.

The unanimous view of modern commentators on these passages is that the construction represents the throne of the glory of Jahveh and that since the vision was seen by Ezekiel in Babylonia the wheels imply that the Glory of the Divine Presence is not confined to one place—the temple at Jerusalem—but has travelled to reveal itself in the distant land of captivity.

The theory then is that a Latin-speaking Jew invented the square not as a cryptic warning against the wicked but as a message of comfort to the just.

The 'Sower' is Jahveh who holds the wheels of the Throne of his Glory with might—that throne which contained the fire that might consume the cities of the wicked, while the four Taus will remind the just of the work of the Thaus set on their foreheads in the Prophet's vision. But the justification for the description of Jahveh as the 'Sower' is extremely slight, resting as it does on a doubtful interpretation of the verb meaning scatter in the Greek version of Ezekiel, and it seems as if the only real point of connection between the square and the vision is the reference to wheels and their motion.

If so, the development of the square might be somewhat thus the 'wheels moving in four directions' being represented as in FIG. 3, a.

R	O	T	A	S	R	O	T	A	S
O			A		O	e		A	
T			T		T	e	N	e	T
A			O		A	e		O	
S	A	T	O	R	S	A	T	O	R
		a					b		

Sator then appears automatically. Next a transitive verb to suit the nominative and accusative beginning and ending with T is required and clearly T E N E T reading the same in both directions is a strong candidate (FIG. 3, b).

It is perhaps easy to think that an expert in palindromes could complete his square with two P's and two R's.

No one can deny that such an origin of the square is possible; but it is perhaps a bold assumption that our palindromist would need the incentive of the Ezekiel passages to bring to his mind the word Rotas, for it is extremely unlikely that however familiar he was with Latin he would hear the Ezekiel passage read in Latin rather than Hebrew or Greek.

It will be observed that this explanation abandons the significance of Grosser's discovery and reasonably so for the arrangement of the original amulet by a non-Christian Jew in the form of a Cross is unlikely before and obviously impossible after the Crucifixion.

We must suppose then that sometime between 60 B.C. (the approximate date of the settlement of large numbers of Jews in Rome) and A.D. 79 a Latin-speaking Jew composed the square on the basis of Ezekiel's vision; that on account of this origin it came to have a magic value which led to its being twice inscribed at Pompeii; that though it contains in the form of the square an arrangement of letters (the T's in the centres of the sides flanked by A's and O's) which make it extremely suitable for a secret Christian sign; and though the twenty-one letters (omitting the A's and O's) make up the words Pater noster twice repeated in the form of a cross, all these are pure coincidences only later observed by Christians who accordingly—perhaps as late as the 5th century—modified it by the change to Form II and began to use it for symbolical purposes.

With this may be contrasted the position if a Christian origin is accepted. Here the development begins with the words Pater noster arranged as an equal armed Cross and associated with the A O symbol in some suitable form. At a later time, perhaps in a period of actual or expected persecution it is proposed to substitute for the Paternoster Cross a magic square which will still to the instructed eye reveal the symbols both of the Cross and of the mystic letters Alpha and Omega in their Latin form.

The Paternoster Cross provides the following stock of letters
(FIG. 4, a)

A A A A

E E E E

O O O O

O T A

O T A

O

A

O

e

A

R R R R

T

N

T

T

e

N

e

T

T T T T

A

O

A

e

O

P P

A T O

A T O

S S

N

(a)

(b)

(c)

Fig. 4

The process might begin with an equal-armed cross with N (necessarily) at its centre and T's at the four extremities flanked by A's and O's (FIG. 4, b) The four E's immediately find their positions to form the palindromic verb tenet (FIG. 4, c). Our Christian palindromist has now to find with his remaining stock of letters (four R's, two P's and two S's) two pairs of words five letters long with their letters in the same order but reading alternately from left and right, one pair having as its middle O T A, A T O, the other pair running O.E.A and A.E.O. S and R in the former, P and R in the latter was the best that could be done. In the latter case he had to be content with the mysterious word A R E P O, but no attempt has ever succeeded in producing a better result and, as we have seen, most are ludicrously worse.

It will be observed that in this case A R E P O has no independent existence as a word, but is simply the reverse of O P E R A and it is pure chance that it contains a Celtic root—if indeed it does so.

It must surely be admitted that in general plausibility this construction far surpasses that based on the hypothesis of its invention by a non-Christian Jew. The qualification non-Christian is perhaps necessary. A difficulty naturally arises from the fact that the A's and O's are in the wrong order in the examples to which a glance naturally turns first, the top left hand corner, and this is corrected in Form II. But it should be remembered that Hebrew and Aramaic (the language of Palestine in the 1st century A.D.) read from right to left and this may have affected a Jew even though Latin speaking, and so also the fact that Sator is in Hebrew the infinitive of a verb meaning, among other things, to hide. Thus the square ends with the notion of the hidden—on this view—a very appropriate one. But this may be merely coincidental. It is however interesting that Cumont, the greatest authority on the religions of the early Empire, in putting forward the suggestion of the influence of the Ezekiel passage on the development of the square, spoke of a converted Jew.

Since they have been put forward by a very distinguished French scholar one further set of suggestions may be briefly mentioned. Professor Carcopino has committed himself to the view that the square is Christian in origin and is based on the Paternoster cross but that it dates from the last years of the 2nd century A.D. He believes that Arepo is a Celtic word meaning something like plough. It is, of course, unfortunate that one of his chief authorities for this interpretation has now produced a quite different one. Relying on the 16th-century evidence from Lyons already referred to (which, he implies, represents an unbroken tradition reaching back to the 2nd century) he attributes the origin of the square to the persecution of the Christians in that city in A.D. 177 under Marcus Aurelius. He is even prepared to maintain, though perhaps only as a pleasing probability that the author of the square is St. Irenaeus, bishop of Lyons soon afterwards.

It will naturally be asked how this date can be reconciled with the two examples from Pompeii. The excavations there have shown that sporadic attempts were made after its burial

by the eruption to dig down into houses in the hope of recovering valuables abandoned during the catastrophe. It is interesting that traces of this, holes knocked through partition walls, and disturbances of the strata are very frequent in a large house in an underground passage of which was found during recent excavations a large treasure of silver plate. Relying on these facts Professor Carcopino suggests that two (at least) of these courageous explorers (the skeleton of one such has been found in a collapsed tunnel) were Christians who during their burrowings thought it right to illustrate their faith by writing up their secret sign. This fantastic notion had already been conclusively refuted by the official in charge of the excavations who was personally present at the discovery of one of the examples and testifies that there was no such disturbance of the strata as such a theory requires. The theory is interesting as showing the lengths to which distinguished scholars are prepared to go rather than abandon a hypothesis once maintained.

It will have become evident that in my view the square was invented by a Christian (whether Jewish or Gentile) at some time before A.D. 79 on the basis of a previously existing form of amulet consisting of two Pater noster's in the form of a Cross flanked by A's and O's. That it was invented in the West, almost certainly in Rome, where a Latin-speaking Christian Church is more likely than anywhere else, and where a Christian community is known to have existed by the middle of the first century. If, as seems probable, it was invented in a time of persecution, this will be that of Nero which followed the great fire of Rome in A.D. 64. If this is accepted there follow a number of implications of some interest in connection with the earliest period of Christian history. It has been recently remarked by a distinguished New Testament Scholar that the most pressing question in the study of the Gospels—namely what happened to the tradition in the period before it became fixed in writing in our Gospels—can only be answered conjecturally. If so even the shreds of evidence which our square can provide merit consideration, for the earliest date attributed by scholars to the oldest Gospel, that of Mark, is about A.D. 65 when the secret amulet was already invented.

In the period with which we are concerned we know certainly of no more than two Christian communities west of the Adriatic, the one in Rome already in existence before St. Paul's arrival, perhaps even before A.D. 50, and one at Puteoli, the chief port in Italy of the eastern trade. To these Pompeii may now be added.

The Church in Rome

With regard to Rome there is more to be said. However cosmopolitan the population of the Imperial city may have been, the existence of converts whose customary speech was Latin is in general reasonable, and we can now conclude that by A.D. 64 the church of Rome besides the majority of Greek-speaking immigrants from beyond the Adriatic, Jews, Syrians, inhabitants of Egypt, Asia Minor, and Greece, a majority which continued to exist at least throughout the 2nd century, there was a minority of Latin speaking converts who used commonly and publicly a Latin name for the Lord's Prayer. This minority must be added to, not substituted for, even a part of the Greek speaking majority and the church of Rome is seen to be by so much larger than has hitherto been supposed, and the *ingens multitudo* spoken of by Tacitus in connection with the events of A.D. 64 by so much less a rhetorical exaggeration.

The Lord's Prayer

The amulet implies evidence for the form of the Prayer earlier by a generation than our evidence for it in the written sources, for it does not occur in Mark and there is considerable variation of form between the versions in Luke and Matthew. Thus Luke (XI, 2 f.) begins simply *Πάτερ* while Matthew (VI, 9 f.) has *Πάτερ ἡμῶν*. The matter is too technical for detailed discussion here but it seems to follow that the more elaborate form in Matthew can be carried back as far as the Lucan form, even if the latter is implied by phrases in Mark and in the Epistle to the Romans.

Alpha and Omega

Here in the original form of the Cross we have a Latin adaptation (or rather translation) of the Greek formula. Its presence, as remarked above, is the strongest confirmation of Grosser's hypothesis. The wide diffusion of the Greek letters as a Christian symbol from the 4th century onwards made them seem a natural appendage to the Cross when Grosser's explanation was published, nor did the Dura examples cause difficulty, since a very few examples were known of 2nd century date. But here we have them as early as the reign of Nero. Those who reject the Christian origin of the square are content to say that the symbol is first found in the Apocalypse and this must be dated after A.D. 79. It is indeed true that the three passages are dated A.D. 85-95 by what is perhaps the best opinion. But when one considers how scanty is the surviving material of Christian origin of this period, and reflects upon the discovery in Egypt of a small and ill-preserved collection of *logia* (isolated sayings of our Lord) it seems rash to reject so summarily the possibility that St. John is quoting a saying already known. Attempts have been made to find earlier (non-Christian) examples of the phrase 'Our Father', but they do not seem to have been successful, and regarding Alpha and Omega, I suppose that most N.T. scholars would agree that however much the idea owes to such passages as Exodus III, 14, or Isaiah XLI, 4 and XLIV, 6, the form of the expression makes its earliest appearance in the Apocalypse.

But it may well be thought that its presence in the amulet is most easily explained if it is a saying of Christ himself. The author of the Apocalypse is then quoting in its Greek form a well-known saying of the Lord. And this is as far as our evidence reaches; in the Aramaic form in which Christ must have spoken, it will have been original with him, though perhaps suggested by the passages in Isaiah. The interest of such an addition to the collection of 'sayings' if its authenticity is accepted need hardly be stressed.

There are other implications not less worthy of discussion but these examples are perhaps sufficient to indicate the

extreme interest of this precious possession of the Corinium Museum.

While this paper was being prepared the discovery of another example of the square also of Form II was made generally known, to be added to the Cirencester one, the two from Pompeii and the four from Dura. This was written in rough capitals on a tile found at Aquincum the site on the Danube adjacent to Buda-Pesth which was the military capital of the province of Lower Pannonia. The tile is a product of a military kiln and the inscription was written before the tile was baked presumably therefore by a soldier employed at the tiler. It cannot apparently be earlier than the 2nd century and could belong to the 3rd or even 4th. Above the square is a further inscription beginning *Roma tibi* then a word difficult to read and finally *ita*. The Hungarian who first published the tile read *Roma tibi subito* and connected it with a known Latin palindrome *Roma tibi subito motibus ibit amor*. But on the tile the last word certainly ends TA not TO and the difficult word can hardly be crushed into the form *Sub*. Professor Carcopino's version in a later publication is more plausible though far from certain. He reads *Roma tibi salus ita*, and thinks that the *ita* points to the square, the implication being that Rome's safety depends on adherence to the Christian faith.