



Harvard Divinity School

On the Origin of the Rotas-Sator Square

Author(s): Duncan Fishwick

Reviewed work(s):

Source: *The Harvard Theological Review*, Vol. 57, No. 1 (Jan., 1964), pp. 39-53

Published by: [Cambridge University Press](#) on behalf of the [Harvard Divinity School](#)

Stable URL: <http://www.jstor.org/stable/1508695>

Accessed: 23/07/2012 20:22

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at
<http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Cambridge University Press and Harvard Divinity School are collaborating with JSTOR to digitize, preserve and extend access to *The Harvard Theological Review*.

<http://www.jstor.org>

ON THE ORIGIN OF THE ROTAS-SATOR SQUARE ¹

DUNCAN FISHWICK

ST. MICHAEL'S COLLEGE
UNIVERSITY OF TORONTO

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

Since the discovery at Pompeii ² of specimens of the ROTAS-SATOR rebus scholarly investigation into the origin of the "magic square" has been bedevilled by a fundamental problem. Is it or is it not sheer chance that the letters of the square can be rearranged in two intersecting PATER NOSTER's with two A's and two O's remaining to be positioned at will? ³

¹ No complete bibliography exists of the immense amount of scholarship that has been devoted to this subject, but very extensive documentation may be found in the articles of F. Focke, "Sator Arepo: Abenteuer eines magischen Quadrats," *Würzburger Jahrbücher für die Altertumswissenschaft* 3(1948), 366-401; M. Harald Fuchs, "Die Herkunft der Satorformel," *Schweizerisches Archiv für Volkskunde* 47(1951), 28-54; H. Hommel, *Schöpfer und Erhalter* (Berlin, 1956), pp. 32-79. For a summary of previous discussion in English see *Canadian Catholic Historical Association: Annual Report* (1959), 29-41.

² *Atti Pont. Acc. Rom. Arch.* 3:12 (1936), 397-400; cf. *Not. d. Scavi* 6:5 (1929), 449, no. 112; 15(1939), 263, no. 139. The discoveries at Pompeii, the earliest examples of the square to have been so far recovered, confirm that the original version began with ROTAS rather than SATOR. For subsequent discussion see Fuchs, *op. cit.*, 31, note 4.

³ This discovery seems to have been made independently by three individual scholars. Chr. Frank, *Deutsche Gaue* 25(1924), 76; F. Grosser, "Ein neuer Versuch zur Deutung der Sator-Formel," *Z.N.W.* 24(1926), 165ff.; S. Agrell, "Runornas talmystik och dess antika förebild," *Skrifter utgivna av Vetenskaps-Societeten i Lund* 6(1927), 31-32. It goes without saying that the intrinsic probability of this rearrangement led to its general acceptance by the majority of reputable scholars. Earlier attempts to pierce the secret of the square had either divided the individual words more or less arbitrarily or had rearranged the individual letters in anagrams ranging from pious prayers to diabolic incantations. For inventories of these see G. de Jerphanion, "La formule magique SATOR AREPO ou ROTAS OPERA, vieilles théories et faits nouveaux," *Rec. Sci. Rel.* 25(1935), 188-225; M. J. Carcopino, "Le christianisme secret du carré magique," *Mus. Helv.* 5(1948), 16-59. The most astonishing feature of these solutions is the number of purportedly meaningful texts which can be wrung from this extraordinary word-square. More than thirty such anagrams are listed by Fuchs, *op. cit.*, 35-37, notes 13-15.

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

For if this combination is after all a fluke, we must jettison all previous attempts to interpret the square along these lines and reshape our thinking on the problem *de novo*. This approach has indeed been favoured in recent years by an increasing number of scholars, who have suggested such widely divergent solutions as an Orphic,⁴ Mithraic,⁵ or local Italian⁶ origin for the square. I do not propose to examine these theories in detail here, since none of them provides a wholly convincing explanation of the complete square.

The crucial point, it seems to me, is to concentrate on the technical problems of building a twenty-five letter rebus with Latin words, the conditions being that one word must be a pure palindrome, one other must have a recognisable meaning when read forwards or backwards, and a third must be meaningful in at least one direction.⁷ This is, in fact, an exceedingly complex operation.⁸ The first step, I suppose, would be to make a list of

⁴ J. Sundwall, "L'enigmatica iscrizione ROTAS in Pompei," *Acta Academiae Aboensis, Humaniora* 15, 5(1945), 16-17.

⁵ A. Omodeo, "La croce d'Ercolano e il culto precostantiniano della croce," *La Critica* 38(1940), 45-61.

⁶ S. Eitrem, "The SATOR AREPO formula once more," *Eranos* 48(1950), 73-74. For a detailed list of scholars who reject the cruciform PATER NOSTER anagram see Fuchs, *op. cit.*, 39, note 18.

⁷ See the useful discussions of H. Last, *J.R.S.* 44(1954), 112-15; cf. J.T.S. 3(1952), 92-97; D. Atkinson, "The Origin and Date of the 'Sator' Word-Square," *J.E.H.* 2(1951), 1-18. The interpretation suggested above differs in several important details.

⁸ For example in a twenty-five letter square quoted by S. Seligmann ("Die

pure palindromes. There cannot be too many such words in Latin, but a number spring to mind, such as: *SENES*, *MALAM*, *SITIS*, *TENET*, *SOLOS*. By combining two examples of such a word in a cruciform arrangement we now have the central axis, so to speak, of the complete construction:

S	M	S	T	S
E	A	I	E	O
S E N E S	M A L A M	S I T I S	T E N E T	S O L O S
E	A	I	E	O
S	M	S	T	S

Furthermore, it is now clear what must be the central letter of the word which with its reverse is to form the perimeter of the square. If that letter is a consonant, it must next be flanked by two vowels (or, if a vowel, which is most unlikely, by two consonants), and an initial and final letter must be added in such a way that the whole forms one word when read forwards and another word when read backwards. Finally a third combination beginning or ending with the predetermined second or fourth letter of the perimeter word has to be composed such that it forms a recognisable Latin word when read in at least one direction. To accomplish all this successfully is, I suggest, a very difficult task indeed.

How, then, did the inventor of the ROTAS-SATOR square proceed? It is possible that either by hard labour or good fortune he hit upon the idea of combining the words ROTAS and OPERA with the palindrome TENET. But in that case we must accept not only the enormous difficulties overcome in discovering this combination but also the fact that by pure chance and presumably

Satorformel," Hessische Blätter f. Volkskunde 13 [1914], 154 ff.) only one word is comprehensible:

S A T A N
A D A M A
T A B A T
A M A D A
N A T A S

With a sixteen-letter square the problem is rather less complicated, e.g.:

R O M A	O R A M	M A R E
O L I M	R O M A	A M O R
M I L O	A M O R	R O M A
A M O R	M A R O	E R A M

See below, note 52.

unknown to its inventor the square can be rearranged in the PATER NOSTER cruciform arrangement. Considering the difficulties of constructing such a rebus in the first place, I find it very difficult to hold that the possibility of so meaningful an anagram of the square is entirely accidental.⁹ It is much easier to believe that the square is in fact derived from the double PATER NOSTER's with two A's and two O's. To construct such a cryptogram on these terms is a considerably less difficult undertaking. The problem now is to rearrange in a word-square four A's, four E's, four O's, four R's, four T's, two P's and two S's, for the remaining letter N must necessarily occupy the centre of the square. As a superficial glance at the PATER NOSTER — A/O sign will show, the task of finding a palindrome for the central axis is now relatively simple, since the letters T E already appear in close proximity to the N. I believe that TENET would have occurred almost immediately to even the most untutored eye. Since T is thus the central letter in the perimeter word, it must now be flanked with two vowels — in this case O and A or A and O:

	O	T	A	
O		E		A
T	E	N	E	T
A		E		O
	A	T	O	

Brief experiment would then have given ROTAS and its reverse SATOR as the complete words forming the perimeter. Finally since P and R are the only remaining consonants the words OPERA and AREPO necessarily complete the square. If this reconstruction is correct, one important conclusion which emerges is that, once TENET is established as the pivotal palindrome, the

⁹ It has been argued that the mathematical odds against this rearrangement being possible by coincidence are astronomical; cf. D. Atkinson, "The Sator Formula and the Beginnings of Christianity," *Bull. J. Ryl. Libr.* 22(1938), 419 ff. I am not certain that this point is entirely valid. Given the conditions that two words of the square must make sense when read in either direction and the third in at least one direction, the number of squares of this kind which can be made with Latin words must be very few. The effect of this would surely be to shorten the odds. What is difficult to believe is that the letters of the square should accidentally make such meaningful symbols as the PATER NOSTER invocation and the A/O sign and that these should accidentally appear *twice over* and *in combination*.

position of all other letters in the square is determined entirely by mechanical necessity. It is therefore pointless to determine the origin of the square, as some have attempted, by recognising intentional cryptic symbols in, for example, the central position of the N¹⁰ or the four-fold combination of A T O.¹¹ On the other hand, the properties of this unique square are such that, once the position of its individual letters was determined, symbols of all kinds must have immediately suggested themselves to the reader.

If, however, we accept that the rebus is derived from the double PATER NOSTER's with two A's and two O's, we must still find some convincing answer to the problem of its origin. Until the Pompeian squares were found, a Christian explanation was acceptable to the great majority of scholars; but the disturbing effect of these discoveries was to present a whole range of new and seemingly insuperable difficulties. These may be conveniently divided into two main questions. (i) Were there in fact Christians at Pompeii before its destruction in A.D. 79? (ii) Even if there were, could they have used or invented a cryptic rebus of this kind?

As regards the first of these it seems best to suspend judgement for the moment. Certainly there were Christians in Rome, where Tacitus, speaking of the disturbances and the great fire of A.D. 64, refers to Christians as an *ingens multitudo* (*Ann.* 15.44). Even before this there is clear evidence of quarrels between Christians and Jews under Claudius¹² (*Suet. Claud.* 25.4), and it is significant that in his Epistle to the Romans (15:20) St. Paul

¹⁰ For example, M. Simon, *Verus Israël* (Paris, 1948), p. 411, has suggested that as the initial letter of the word *nomen* N might also serve as the Latin equivalent of the Hebraic *šem*, the unique Divine Name, fount of Divine Power and centre and origin of all things. With this may be compared the fanciful theory of H. Wehling-Schücking, "Zum Deutproblem der Sator-Inschrift," *Album philologicum* voor Th. Baader (Tilburg, 1939), pp. 197ff., who treats the central N as an abbreviation for *Nazarenus*.

¹¹ Jerphanion, *op. cit.*, 225, note 102, records the observation of an anonymous correspondent that the T's in the square are in every case flanked by A and O, the three letters being regarded as unmistakably Christian symbols (cf. *Rev.* 1:8; 21:6; 22: 12).

¹² Perhaps these quarrels helped to focus official attention on the Christians: cf. an imperial edict of the period, found possibly at Nazareth, decreeing the death penalty for anyone who destroys a tomb or casts out the buried or "with evil intent removes them to some other spot." M. P. Charlesworth, *Documents Illustrating the Reigns of Claudius and Nero* (Cambridge, 1939), p. 15, no. 17.

speaks with awe of the Church at Rome as a comparatively old institution. We know, too, that St. Paul once stayed at Puteoli only a few miles from Pompeii, and it is hard to believe that news of St. Paul or of the Christians had never travelled between the two towns.¹³ Some slight archaeological evidence has also been held to indicate the presence of Christians in the vicinity. Excavations in the nearby town of Herculaneum have unearthed a large house of *ca.* A.D. 50, in the upper part of which a panel of stucco was discovered bearing the imprint of a cross.¹⁴ Traces of nails suggest that the cross was of wood, while other nails in the panel may mean that the cross was removed and a cover placed over the area. With this may be compared a similar cross from Pompeii which was published by Mazois in 1824¹⁵ along with a celebrated charcoal graffito thought to refer to Christians (CIL IV, 679). The difficulty with all this evidence, however, is that it is extremely tenuous. Crosses do not necessarily imply the presence of Christians,¹⁶ and the character of the find-spot at Herculaneum, with its wooden dice box and loose die, has been held to rule out any religious connection. The cross at Pompeii has never been accepted as genuine, and when the original charcoal inscription faded, sceptics were quick to emphasise discrepancies in the various copies of the original.¹⁷ In the present state of the archaeological record the most that can be said is that there may have been a few solitary Christians in the area.¹⁸ There is clearly no justification for supposing the existence of a Christian community.

¹³ For evidence of communication between the two towns see CIL, IV, 2152, from Pompeii, recording greetings to the colony of Puteoli.

¹⁴ For a summary of the detailed description by Maiuri (Atti Pont. Acc. Rom. Arch. 3:15 [1939], 193-218) see Atkinson (above, note 7), 16-17.

¹⁵ Les Ruines de Pompei (Paris, 1824), II, 84-5.

¹⁶ The consensus of opinion nowadays seems to be that, far from having any sacred character, the imprint is simply that of some trivial object, such as a wall-bracket; cf. L. de Bruyne, "La 'crux interpretum' di Ercolano," Riv. Arch. Crist. 21 (1945), 281ff. This explanation, however, does not account for the projection of the vertical stave above the transverse nor for the symmetrical increase in the width of the transverse groove towards both ends. Cf. Atkinson, *op. cit.*, 17.

¹⁷ *hristian...*, *hristiani*., *hristianos*, *Christianos*

¹⁸ It should be noted in this connection that Tertullian, Ap. 40.8, which is usually held to show that Tertullian denied the existence of Christians at Pompeii before its destruction might on the contrary be interpreted as actually implying their presence. See the discussion of Last (above, note 7), 113-14.

Yet even if there were Christians at Pompeii before its destruction, we are still left with the question of whether they could have used or invented a cryptic rebus of this kind. The main problems here were outlined by Jerphanion at a meeting of the Academy of Inscriptions in 1937,¹⁹ and they still retain their force today. (a) The configuration of the intersecting PATER NOSTER's (if, indeed, this is correct) presupposes that the cross was already a Christian symbol before A.D. 79. The difficulty here is that the cross does not appear to have become a familiar symbol in Christian art until the time of Constantine.²⁰ Before then crosses which are definitely Christian appear only in isolated examples, the earliest of which are considerably later than the period of the Pompeian squares. For example, the equal-armed or Greek crosses found in catacomb inscriptions from the Lucina and Priscilla cemeteries are dated about the middle of the second century A.D. Similarly, the earliest literary allusion to the symbolic use of the cross is in a passage of the Epistle of Barnabas (9.8), which can hardly have been composed much before A.D. 130-131:

Learn therefore, children of love, concerning all things abundantly, that Abraham, who first appointed circumcision, looked forward in the spirit unto Jesus, when he circumcised having received the ordinance of three letters. For the scripture saith: *And Abraham circumcised of his household eighteen males and three hundred*. What then was the knowledge given unto him? Understand ye that He saith *eighteen* first, and then after an interval *three hundred*. In the eighteen I stands for ten, H for eight. Here thou hast JESUS (IHΣΟΥΣ). And because the cross in the T [= three hundred] was to have grace, He saith also *three hundred*. So He revealeth Jesus in the two letters, and in the remaining one the cross.

Here, however, it is clearly the *tau* cross (T) which figures in the illustration.²¹ (b) The Christian use of A and O was apparently

¹⁹ CRAI (1937), 84-93.

²⁰ Lexicon für Theologie und Kirche (Freiburg, 1961), s.v. Kreuz, 606-18. An early example from the third century is probably heretical; cf. C. Cecchelli, *Monumenti Cristiano-Eretici di Roma* (Rome, 1944), pp. 86, 119. On the general development of the cross in Christian symbolism see A. Grillmeier, *Der Logos am Kreuz. Zur christologischen Symbolik des älteren Kreuzigungsbildes* (Munich, 1956), pp. xii and 151; J. Fink, "Grundlagen des Kreuzigungsbildes," *Th. Rev.* 51 (1957), 241-248; E. Peterson, *Frühkirche, Judentum und Gnosis* (Freiburg, 1959), pp. 15ff.

²¹ Cf. St. Justin, I Apol. 55; Dialog. 90. 4-5, 91. 2-4.

inspired by passages in the Apocalypse (1: 8; 21:6; 22: 13), which in A.D. 79 "was still not written." If the square were Christian, one would have to presume that this symbolism had already gained circulation in Christian circles before the eruption of Vesuvius.²² (c) If the square had been invented by Christians of the first century, it ought to have been in Greek, since Greek rather than Latin seems to have been used for teaching and liturgy. We have no other evidence for the use of Latin at this early date, even for the Lord's Prayer. (d) Cryptic Christian symbols seem to have appeared first during the persecutions of the third century. This is a very considerable difficulty, since the square must presumably have been used among Christians as a means of mutual recognition designed to deceive their pursuers. Its appearance as a Christian symbol at Pompeii before A.D. 79 can only be explained, therefore, by assuming that the persecution of Nero extended beyond the boundaries of Rome, and for this we do not have good evidence.²³

The most promising²⁴ solution to these difficulties is that the Pompeian squares are Jewish²⁵ in origin. The attractions of this theory are several. In the first place we do know that considerable

²² The earliest epigraphical examples of the A/O sign date from the end of the third century A.D.: Cabrol, *Dictionnaire*, I(1924), 1-26, s.v. A/Ω; E. Lohmeyer, *Reallexikon f. Antike u. Christentum*, I(1941), 2, s.v. A und O. For the general significance of this sign see the documentation of Fuchs, op. cit., p. 50, note 45.

²³ One notable attempt to overcome these problems is that of M. J. Carcopino (above, note 3), who argues that the Pompeian squares were, in fact, inscribed after the destruction of the town by treasure-seekers burrowing among the ruins. This theory seems to have been dissipated on the whole by Atkinson's article (above, note 7). Clandestine scavengers, he points out, would have been more likely to dig in the vicinity of the better-class houses, away from the building that housed the more complete of the Pompeian squares. In any case, crude digging would be particularly easy to detect at Pompeii, and there is no trace of this in the neighborhood where the undamaged rebus was found.

²⁴ The only other notable attempt to explain the square in terms of Grosser's discovery (above, note 3) is that of H. Hommel (*Schöpfer und Erhalter* [Berlin, 1956], pp. 32-80), who traces the *pater noster* invocation, A/O symbol etc. through Cicero and Posidonius to a Stoic and before that a Platonic origin. Even if the texts he adduces provide real parallels, however, there remains the very great difficulty that cryptic writing of this kind does not seem to have been a basic characteristic of Stoicism, nor do we have other evidence for Stoic influences at Pompeii.

²⁵ An earlier interpretation of Cumont subsequently developed by Jerphanion (*CRAI* [1937], 93; cf. *Rend. Pont. Acc.* 13 [1937], 7ff; *Rech. Sci. Rel.* 27 [1937], 326ff.), while abandoning the PATER NOSTER-A/O anagram, had supposed a Jewish origin in tracing the imagery of the square to Ez. 1:15ff., where in the Vulgate text both ROTAS and OPERA occur in close proximity during the account of the prophet's vision. As the remaining words of the square are not discernibly relevant, however, the point of connection is very tenuous, and it is in any case

numbers of Jews had been settled in Pompeii²⁶ and its vicinity in 62 B.C., soon after Pompey's campaigns in the east. Their reputation as superstitious charlatans and dabblers in magic had been widespread since the days of Moses,²⁷ and they were notorious for their use of magic talismans, amulets, spells and riddles.²⁸ Word magic and alphabetic acrostics,²⁹ moreover, played an important part in Jewish exorcism, cosmogonic theories, and the symbolic representation of divine powers. Not only were the letters of the alphabet believed to comprehend all knowledge, but the written word in particular was held to be charged with magic;³⁰ hence the efficacy of the palindrome, the magic of which could not be destroyed, whichever way the spell be read. A rebus which is typical of this magic genre may well have been inscribed by Latin-speaking Jews, familiar with Hebrew and the Hebraic method of writing. What is most striking, however, is that a Jewish interpretation provides a convincing answer to many of the technical problems inherent in a Christian origin. As several recent studies have stressed,³¹ the PATER NOSTER invocation has its roots in Judaism, where it is found in the Babylonian and Palestinian recensions of the *Shemone esre*, in which God is fre-

difficult to believe that a Jewish inventor of the rebus would have been inspired by a Latin version of the Ezekiel passage, which he would surely have read in Hebrew or Greek. If the square is derived mechanically from the PATER NOSTER-A/O sign, as I have suggested, this derivation would, of course, lose all force. For a detailed review of Cumont's interpretation see Atkinson (above, note 7), 3-6.

²⁶ The best discussion of Jewish influences at Pompeii is by J. P. Frey, "Les Juifs à Pompei," R. Bibl. 42 (1933), 365-84.

²⁷ Origen, contra Celsum 1.26. Cf. Th. Reinach, Textes d'auteurs grecs et romains relatifs au judaïsme (Paris, 1895), p. 165. The origin of this is probably to be found in the episode of the six plagues of Egypt, Ex. 7-11.

²⁸ For recent discussion of superstition and magic among the Jews see M. Simon (above, note 10), pp. 394-431; E. R. Goodenough, Jewish Symbols in the Greco-Roman Period, II (New York, 1953), pp. 153-295.

²⁹ R. Marcus, "Alphabetic Acrostics in the Hellenistic and Roman Periods," J.N.E.S. 6 (1947), 109-15.

³⁰ A famous example of word-play occurs in the Talmud: ". . . R. Aqiba expounded: When husband and wife are worthy, the *Shechinah* abides with them; when they are not worthy, fire consumes them. Raba said: [The fire which results] from the woman is severer than that from the man. What is the reason? In the case of the former [the letters *aleph* and *shin*] are consecutive but not in the case of a man." I. Epstein, ed., The Babylonian Talmud (London, 1938), Sotah 17a, 89. Aqiba is also credited with a meditation on the individual letters of the alphabet. H. L. Strack, An Introduction to the Talmud and Midrash (Philadelphia, 1931), pp. 229, 347, n.4. The only known example of a magic square in Hebrew is that attributed at a much later period to Abraham Ben Meir Ibn Ezra (1092-167 C.E.); cf. A.G. Eschkol, Encyclopaedia Iudaica, II (Berlin, 1928), 49.

³¹ Notably Fuchs, op. cit., 50-51. Cf. also Simon (above, note 10), p. 412. For the

quently addressed as "Our Father."³² A similar invocation to "Our Father" is found in the prayers of Rabbi Eliezer (*ca.* A.D. 90) and Rabbi Aqiba (*ca.* A.D. 135),³³ while in the *abinu mal-kenu*, the archaic liturgy (*cf.* Taan. 25b) recited after the *shemone esre* particularly during *Kippurim*, the formula occurs repeatedly — on no less than forty-four occasions in the present liturgy. Furthermore, though the A/O sign may not have come into Christian use before it appeared in the Apocalypse, the idea is already present in a Jewish context in such passages as Is. 41:4 and 44:6, though unrelated to the alphabet. The whole symbolism, in fact, may have passed into Christianity from the Talmud, where the letters *aleph* and *tau* symbolise completeness and totality.³⁴

It may be useful to note that a Jewish origin provides a plausible answer to another of the difficulties inherent in the Christian interpretation. I refer to the intersecting PATER NOSTER's with the remaining A's and O's. If the square was in fact derived from this by displaced Jews, it would be reasonable to interpret the configuration here as that of the Hebrew sign of *tau*. What was the ancient significance of this symbol has been shown by E. Dinkler³⁵ in a study of cross signs from Jewish ossuaries and other funerary inscriptions. It will be recalled that in the first vision of the Temple granted to Ezekiel (Ez. 9:4f.) the sign of Jahweh with which the Just were to protect themselves from the Avenging Angel is called *tau* (טו). Dinkler points out that in its archaic form this could be written as a cross and therefore argues that the cross sign (+ or X)³⁶ was a sacred symbol of protection that stamped its wearer as a possession of Jahweh. The use of the cross as a cabbalistic mark of protection is strikingly illustrated on the well-known ossuaries from Talpioth, where plus signs (+)

possible derivation of the Lord's Prayer from the Jewish *Amidah* see Ch. Guignebert, "Le Pater," *Mélanges G. Glotz* (Paris, 1932), I, pp. 417-30; H. L. Strack and P. Billerbeck, *Kommentar zum Neuen Testament aus Talmud und Midrasch*² (Munich, 1954), I, 392-96 (on Mt. 6:4) and 406-16 (on Mt. 6:9).

³² E.g., in the Babylonian recension, petition 5: Lead us back, Our Father, to thy *Torah* . . . ; petition 6: Forgive us, Our Father, for we have sinned; in the Palestinian recension, petition 4: Grant us, Our Father, knowledge of Thee and comprehension and understanding from Thy *Torah*; petition 6: Forgive us, Our Father, when we have sinned against Thee.

³³ For full documentation see Fuchs, *op. cit.*, 50, note 43.

³⁴ Strack and Billerbeck (above, note 31), III, 789 (on Rev. 1:8). The idea also occurs in Martial, *Epig.* 9.95.

³⁵ "Zur Geschichte des Kreuz-symbols," *Z.Th.K.* 48(1951), 148-72.

³⁶ In palaeo-Hebrew script *tau* was regularly X from the eighth century B.C. to

appear in conjunction with magical graffiti evidently inscribed for prophylactic purposes.³⁷ Much more significant is the fact that there is good evidence for the use of this token³⁸ among Jewish communities in Italy. The Vigna Randinini catacomb at Rome, for example, has yielded no less than four *loculus*-inscriptions,³⁹ each of which is accompanied by one, two or three crosses. Like the finds on the Talpioth ossuaries these are all carelessly engraved, the principal difference being that the Roman examples are of diagonal rather than rectangular crosses. An important point to note in this connection is that the PATER NOSTER anagram merely requires that its constituent words should intersect at the central N. Scholars seem to have taken it for granted that the configuration must be necessarily rectangular though there is no reason why this should not be diagonal, leaving the A's and O's to be positioned arbitrarily as before: for example,

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

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

the second century A.D. As a mark on ossuaries, however, + and × seem interchangeable: for example, a group from No. 79 of the *Dominus Flevit* on the Mount of Olives includes ossuaries inscribed with rectangular (+) and diagonal (×) crosses: ossuary number 12 bears both forms; B. Bagatti and J. T. Milik, *Gli Scavi del "Dominus Flevit,"* I, *La Necropoli del Periodo Romano* (Jerusalem, 1958): R. Bibl. 66(1959), 299-301; *Antonionum* 34(1959), 345-47; *Th.L.Z.* 84(1959), 569-97.

³⁷ See the discussion in *N.T.St.* 10(1963).

³⁸ It is most unlikely that the cross-sign always represents the "sign of Jahweh," since crosses appear regularly on eastern charms and amulets, being by no means restricted to Jewish use; cf. Goodenough (above, note 28), I, p. 132. That it served generally as a magical mark of protection, however, seems certain.

³⁹ Frey, *CIJ*, nos. 149, 173, 203 (in Greek); no. 229(Greek transliterated into Latin).

As has already been stressed, the rectangular intersection of the double TENET's within the square is determined by the mechanical requirements of constructing word-squares of this kind, and it is therefore futile to see a cryptic *tau* in this or to see any intentional symbols in the fourfold combination of A T O, significant though such symbols must have seemed, once the square was constructed.

One further note might be added on the riddle of AREPO, the meaning of which still baffles scholars. Should one interpret these five letters as a proper name,⁴⁰ as a corrupt or primitive Latin substantive,⁴¹ as initials or abbreviations (the possibilities of this are limitless)⁴² or as a loan word from another language?⁴³ Most solutions in the past seem to have been based on a common assumption that, since every other word in the square has a recognisable meaning when read forwards or backwards, therefore AREPO should be as meaningful as its palindrome OPERA. Once the origin and character of the square is properly appreciated, however, there is no longer any need to insist that AREPO should be philologically soluble. Nonsensical words of this kind do, in fact, abound in the magical papyri⁴⁴ which have come down to us. In some cases these are foreign words transliterated or proper names abbreviated or corrupted; in others their origin is quite obscure. What is clear is that the more unintelligible these words were, the greater the veneration in which they were held and the more efficacious the powers with which they were accredited.⁴⁵ This characteristic, of course, is one common to all

⁴⁰ F. Haverfield, *Arch. J.* 56 (1899), 319-323. *Eph. Ep.* 9, 1001; cf. R. G. Collingwood, *The Archaeology of the Roman Empire* (London, 1930), p. 176. For similar examples see Fuchs, *op. cit.*, 33, note 8.

⁴¹ *arripere*, *rapere*, *apparere* and *parere* have all been thought etymologically connected with *arepo*. For documentation and discussion see Fuchs, *ibid.*, 34, note 12.

⁴² E.g., SA(LVA)TOR A RE(GE) P(ONTIFICI)O or SATOR A R(ERUM) E(XTREMARUM) P(RINCIPIO) O(MNI). See the inventories of Jerphanion (above, note 3), 221, and Fuchs, *op. cit.*, 35, note 13.

⁴³ Carcopino (above, note 3), 28-29, believes that AREPO is Celtic in derivation and means plough; cf. F. Dölger, *ICHTHYS* 5 (1932), 57-64, for a similar suggestion. D. Daube sees in AREPO a Hebrew or Aramaic rendering of Alpha O, *Exp. T.* 62 (1951), 316.

⁴⁴ See, e.g., the collections of K. Preisendanz, *Papyri Graecae Magicae*, Vols. I and II (Leipzig, 1928-31), and S. Eitrem, *Papyri Osloenses*, Fasc. 1 and 2 (Oslo, 1925-1931).

⁴⁵ Simon (above, note 28), pp. 399-400.

forms of ancient magic and a feature of Jewish in particular; hence the great care with which these incomprehensible ⁴⁶ words were mechanically reproduced. If the reconstruction I have suggested of the development of the square is correct, it would follow that AREPO is simply the reverse of OPERA and that its form is determined entirely by the problems inherent in constructing a twenty-five letter square from the intersecting PATER NOSTER's with two A's and two O's. To suppose that AREPO already existed as a meaningful word in its own right before the invention of the rebus is therefore pointless, and attempts to determine the nature and origin of the square on this basis are doomed to failure.

The remaining question is the proper interpretation of ROTAS OPERA TENET AREPO SATOR. As a general rule scholars have either attempted to construe these words concurrently in a supposedly grammatical sentence ⁴⁷ or have supposed that the lines of the square must be read in some less obvious way such as *boustrophedon*.⁴⁸ It is questionable whether such an approach is justified or legitimate — the very fact that no explanation has ever convincingly elucidated their "Delphic" meaning raises grave doubts. The "magic" of such a square rests surely on the perfect symmetry of its component letters which yield the same combinations in four different directions. To construct a letter-square from the PATER NOSTER — A/O cross in such a way that four of its combinations make Latin words is surely a very considerable technical achievement. But to require further that the whole five words (one of which is certainly not in a Latin dictionary) should also be meaningful when read consecutively ⁴⁹ is

⁴⁶ Cf. CIJ, I, 562 (from Pompeii), where incomprehensible words accompany a magical figure closely resembling those found in the magical papyri. The relevance of this inscription to the ROTAS rebus or at least to the mentality that produced it does not seem to have been noticed before.

⁴⁷ E.g., "The Sower, Arepo, guides the wheels carefully": Collingwood (above, note 40); or, "The sower intentionally holds the wheels firmly on the plough-field (on his plough)": Jerphanion (above, note 3), 196; Carcopino (above, note 3), 29.

⁴⁸ By reading only the first three words one would thus get SATOR OPERA TENET in four different directions: Fuchs, *op. cit.*, 43-46. Though this phrase might conceivably recall such passages as Galatians 6:7-10, or even Proverbs 1:31, 18:20, etc., any interpretations along these lines is purely subjective if the rebus is simply a reconstruction of the PATER NOSTER-A/O symbol.

⁴⁹ The words were never *written* consecutively until the early Middle Ages and then only in a corrupt form: e.g., SADOR ALADOR DANET ADERA RODAS

to expect the impossible. Any superficial "meaning," therefore, which may allegedly be wrung from the individual words when read in conjunction I should have thought purely accidental.

It would be well to sound a note of caution in conclusion. Though clearly preferable to other solutions, the Jewish interpretation is not entirely free from difficulties. One has to suppose, for example, that the square was composed by Jews who knew enough Latin to translate the "Our Father" invocation into that language, to transliterate the A/Ω symbol, and to construct anagrammatically the words ROTAS, OPERA and TENET. This objection is not, however, insuperable, since we do have epigraphical evidence for Pompeian Jews writing in (admittedly bad) Latin,⁵⁰ nor is it necessary to suppose that they recited their *Shemone esre* in Latin, translating the liturgical *abinu*. Even so, there remains the disquieting doubt that so long as no one has actually seen a graffito of the PATER NOSTER — A/O symbol,⁵¹ we cannot be entirely certain that the ROTAS square was not devised independently⁵² and that it is not sheer chance that its

— "the names of the nails of Christ's cross": W. E. Crum, E.E.F. (1897/8), 63; J. Simon, *Anal. Boll.* 49(1931), 165. In Abyssinia these five words were used in the eleventh century to denote the five wounds of Christ: H. Ludolf, *Ad Historiam Aethiopicam Commentarius* (Frankfurt a./M., 1695), p. 351.

⁵⁰ For Jewish inscriptions from Pompeii written in Latin see CIJ, I, 564–67. Only a fraction of the Jewish inscriptions from Rome, Pompeii and other sites are written exclusively in Hebrew, but solitary Hebrew words occur occasionally in Greek, Latin, and bilingual inscriptions, thus indicating that some recollection was preserved of the ancient tongue. H. J. Leon, *The Jews of Ancient Rome* (Philadelphia, 1960), pp. 76–78.

⁵¹ The graffiti accompanying the undamaged rebus may possibly provide evidence. Above the square is written in three lines SAVTRAN(e) VA(le)/S/△ and below, again in three lines, ANO/SAVTRAN(e)/VALE. The two farewell greetings to Sautranus or Saturanus appear to be by the same person who wrote the rebus, and the large S is similarly deeply incised, but the triangle and ANO are more lightly scratched in what is clearly a different hand. While the S might reasonably be explained as an abbreviation for s(alutem), it is a matter for conjecture what interpretation should be placed on the remaining graffiti. If, as seems likely, they were inscribed by a later hand, their position immediately above and below the rebus might well indicate that they were intended as a kind of key to its meaning. Several commentators have noted in this connection (Hommel [above, note 24], pp. 65–69) that a, n and o are the first, middle and last letters of the Greek alphabet, that is we have here the A/O symbol combined with the central N of the rebus. Could this be a symbol of the deity who is past, present, and future (cf. Rev. 1:8, 17), and if so, is the triangle likewise a symbol of His Eternity? If such an interpretation of ANO is not, in fact, pure fantasy, we may have evidence here for the association of the A/O symbol with the rebus at a very early date.

⁵² Composing word-squares may have been a favourite pastime at Pompeii. Cf.

letters can be rearranged in so meaningful a symbol. What verdict will finally be passed on this baffling word-square depends therefore on future archaeological discoveries. But in the present state of the evidence it does seem reasonable to conclude that the rebus, at least in the form we now have it, originated with Latin-speaking Jews in the period immediately prior to the Christian era. If so, its origin is sufficient explanation of its cryptic form, and there is no need to trace it to the pogroms of, for example, A.D. 19 or A.D. 49. It would seem that it fell into disuse, to be revived later as a definitely Christian symbol at Dura-Europos,⁵³ Aquincum⁵⁴ and Cirencester.⁵⁵ Thereafter its remarkable properties won it widespread fame from the early Middle Ages until the nineteenth century as a reliable talisman against fire, tempest, theft and sickness. Lest any of us should be tempted to sneer at the gullibility of our ancestors, it might be noted that in recent years both the Nestlé Milk⁵⁶ Company and a California bookseller⁵⁷ have enlisted its magic for advertising purposes — in both cases apparently to good effect.

Not. d. Scavi 6:5 (1929), 465, no. 200 = Diehl, *Pompejanische Wandinschriften und Verwandtes* (1930), no. 856:

R	O	M	A
O		M	
M		O	
A	M	O	R

With this may be compared the curious alphabet discovered on the column close to the undamaged SATOR inscription (*axbvctdserfq* etc.): Not. d. Scavi, *ibid.*, 142 = Diehl 56. The popularity of such a pastime, however, sheds no light on the problem of whether the Rotas square was derived from the PATER NOSTER-A/O symbol or invented independently. In later times, Sidonius tells us (9.14. 4-5), the palindrome or *versus recurrens* provided endless amusement for Roman landed gentry.

⁵³ M. I. Rostovtzeff, *The Excavations at Dura Europos: Preliminary Report of the Fifth Season* (New Haven, 1934), pp. 159-61; *Sixth Season* (*ibid.*, 1936), p. 486.

⁵⁴ J. Szilagyi, *Acta Antiqua Academiae Scientiarum Hungaricae* 2(1954), 305-310 = *AEpig.* (1956), no. 63. Cf. M. J. Carcopino, "Encore le carré magique," *CRAI* (1955), 500-07.

⁵⁵ See above, note 40.

⁵⁶ E. v. Welz, *Societas Latina* 5(1937), 57.

⁵⁷ Fuchs, *op. cit.*, p. 29, note 1.