PALINDROMES: THE ROTAS SQUARE

DMITRI A. BORGMANN
Dayton, Washington

Poetry's lyre rings false on the superficial shell of a poem, but on the inside it speaks of a hidden and profound meaning to those who listen. Those who read with penetration, who refuse the outer layer of falsehood, find the sweet center of truth secreted within.


In 1868 a painted fragment of wall plaster was taken from the dirt of a Roman villa under excavation near Victoria Road, county Gloucester, of south-central England. Its removal was attended by a Captain Abbott, then curator of the Cirencester Museum nearby. Scratched into the ochre surface of the unearthed plaster was the following palindrome, arranged in the form of a ROTAS magic square. This square, not much larger than the palm of a man's hand, shortly realized an unusual amount of attention. Formidable apparatus critica with which to take its true measurements were applied by interested archaeologists and scholars of antiquity, but the square has resisted translation and much remains obscure of its history, origin and significance. In the German lowlands it had been known as a charm against toothache and the bite of mad dogs, the Portuguese had introduced it into Brazil where the Indians used it to protect against snakebite, and there were reports of its use in the area that is now Yugoslavia (Jerphanion, 1935). However, on the unlikely service of the magic square as the lone collator of such distinct geographies and cultures, expert opinion has remained for the most part timid and withdrawn.

In 1874 an article signed by C. Wescher called attention to a Greek manuscript dating from the end of the fourteenth century which bore the magic square in an inverted form, beginning with sator, and provided an interpretation alongside in ancient Greek. Wescher was convinced by the nature of his find that the square itself should be attributed to the spirited wordplay of certain Byzantine scholars and their tradition, which were known to relish and delight in cryptic symbolism. The Greek words which the manuscript bore to the side of the square appear unto this day as the oldest extant translation of the palindrom, and Wescher boldly offers a further translation of his own based on a rendering of the Latin and Greek entries: The sower is at the plow, and the work (of his tilling) turns the wheels (Le semeure est à la charre, le travail (du labour)
occupe les roues) (Wescher, 1874). Thus given over to a current
tongue, the magic of the square seems largely dispelled. On Wescher's
recommendation its form can be seen as a curious epigraph, but no
more so than other epigraphs of strange meanings and allusions. And
the significance of its palindromic format can best be understood as the
device of a parlor game, an enigma which comes down to us intact from
the Middle Ages.

Nevertheless, certain observations should be made concerning whe­
ther or not Wescher had judiciously translated the magic square. The
grammatical sense of the Latin is intact in his translation: what had
been lost is merely the symmetrical arrangement of words and letters
to which Wescher attributed no functional role in the square's intended
meaning, as can be seen from his French rendition. And if it is the
grammatical significance and that alone which is to be translated from
one line or verse into another, then Wescher was right to ignore the in­
ternal structure of the magic square in his translation. But, to assume
that form has no bearing on meaning is a risky business in philology --
and to deny the connection between the two is to argue against the powers of lan­
guage to articulate the deep moods and tremors of sensitivity in the hu­
man psyche. For certainly the formations of our expressions carry their
own hidden symbolism and the messages transmitted by these symbols
are then, in turn, anchored directly to meanings from the deepest layers
of our thinking. Hence, any theory that aims to encompass the mean­
ings imbedded in our language must also comprehend the deep implica­
tions of its second, active presence, its form.

Thus structure is an important consideration in any translation, but
in the case of the palindrome it lurks within the language as an overbear­
ing presence. The palindrome verse form bears its particular restric­
tions as do other poetic forms, such as the sonnet, the Alexandrine, and
the riddle. However, the restriction which the palindrome bears is of a
different design than considerations of meter, stress, and stanzaic di­
vision. The palindrome is restricted to a grammatical articulation of
symmetry arranged about a vertical axis, and in the case of the rotas
square this symmetry is expressed thus: Rotas opera tenet areposator.
The verse is arranged symmetrically about the letter n, which serves
as an axis, and in the case of the rotas magic square this symmetry is
compounded horizontally as well, for the square yields a symmetrical
reading regardless of which corner is chosen as a point of departure.
The formal restrictions on the language of the palindrome, then, make
for a verse which returns upon itself and brings the eye to the center --
perhaps something can be made of this. However, any assessment of
the original significance of the form and its functional role in the crea­
tion of the rotas square would require firm evidence from a shadowy
and uncontroverted past, almost too much to ask.

Nevertheless, Wescher's conclusions remained at the head of the cri­
tical discussion until nearly a quarter of a century later. In 1899 the Ar­
chaeological Journal issued an article by F. Haverfield which argued
from archaeological evidence for the much earlier, Roman origin of the
rotas square. The plaster of the Cirencester specimen resembled that

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On Wescher's Roman inscriptions. And it is clear that no such interpretation is possible. The square should be understood as the "latter empire" and to assume that the letters in the inscription are Latin is therefore incorrect. The derivation of the word arepo is problematic, as it appears to have roots in an ancient Gaulish term for a measure of ground, arepennis. Haverfield points out that the philological distance from the Gaulish arepennis to the Latin arare, to plow, is slight. Other writers have shown that, in fact, rude plows equipped with wheels were commonly known in Gaulish France, and were called by such a name (Carcopino, 1953-65; Jerphanion, 1935).

Southern France provides further evidence for its influence in the creation of the rotas square. Another specimen of it, beginning with sator, is mentioned by Haverfield to have been engraved upon a slab of terracotta over the door of the choir in the chapel of St. Laurent, near Rochemaure in the Rhone valley. Other parallels he also considers Roman in origin, taken from the "later empire". These are described as the "palindromes" which occur on late pavements and in late poems. Orleansville, in northern Algeria, contains two such pavements whose outer sides form the palindromes AISELCECELSIA AND SODRECASACERDOS, and whose inner dimensions are composed of a precise grid of letters. The total effect is that of a labyrinth of letters, protected on all four sides by a palindrome. Starting from a central character, these squares yield the secreted messages Sancta Ecclesia and Marinus Sacerdos, respectively. The editor, in addition, appends a note instructing that a similar inscription is to be found on a tomb in the church of St. Salvador, Oviedo, in northern Spain (Haverfield, 1899).

So then, one would think it is not only the magic square itself that is so striking. The diverse and glowing proliferation of magic squares which are, oddly enough, more often than not discovered in conjunction with church properties, would now seem to affirm a tradition and a model from which they are derived. And if such an antecedent formula is to be allowed, it must be capable of reflecting the permutations which its after-images, the magic squares, have made evident. This model can be the palindrome alone, for it is the one thread which draws these otherwise prodigal examples together into a singular family. For although the intended manner of reading the magic squares differs from one specimen to another, the palindromic form is represented within each particular instance.

Yet what is lacking is a means of getting at the intended significance of the palindrome as a linguistic and a poetic form, and it seems that the only avenue of approach for such an analysis would be through a comprehension of the significance attached to the recurrent symmetry which it so unerringly expresses, and which sets it apart from other literary forms. That this symmetry is a matter of intention by the creators of palindromes and magic squares is beyond dispute, for it is far too rare a quality to have occurred by chance and in such variety. And that this symmetry was intended to signify something other than puerile wordplay must be demonstrated, for theorizing about the intended significance and fundamental experience of linguistic forms would tend to show more about what can be made of them in retrospect than what was intended by
them in history.

The scholars of antiquity are as a whole a cautious lot, and the German members of this group may have been the most wary, or, at least, this has been so in their treatment of the magic square. In 1899, the same year as the publication of the Haverfield article, a book appeared in Germany that cited a Coptic papyrus bearing the magic square in its rotas form. Subsequent opinion of the German illuminati held that this example was the most ancient specimen of the square yet discovered, although there was a reluctance by most German critics to date the papyrus upon which it occurred prior to the fourth or fifth century A.D. Franz Dornseiff, for one, judges the square from the Berlin papyrus to be a charm from the Middle Ages, and he lists the places of its wide-spread occurrence (Dornseiff, 1925; Erman and Krebs, 1899). This dating of the origin of the square would all but rule out any Roman hand in its creation, for by the middle of the fourth century the barbarization of the Roman Empire had already occurred, and what was left of a truly Roman culture in Coptic Egypt spoke Greek, not Latin. Perhaps the German scholars were not aware of the Cirencester find, for there is no mention of it, or maybe they would simply prefer to reserve their opinion on the antiquity of the rotas square and the impenetrable history which it must have, to them, represented.

Nevertheless, scholarship will never profit by turning away from the possibilities generated by propositions that do not fit comfortably into current trends and beliefs. The scholastic neglect met by the possibility of the rotas square's antiquity testifies only to the lack of that period's ability to process symbolic materials. The genuine reluctance of the German experts to allow a classical origin of the rotas square and its strange symbolism appears to have been motivated by a common desire to limit the scope of such wordplay to a medieval past-time, where its referents may be considered pointless and without content. Otherwise, modern language theory would be obliged to undergo transformations that would allow for the inclusion of the improbable messages carried by the word squares scattered about the Mediterranean during the classical period. Such an obligation would require a theoretical ability to know the meanings hidden between words and beneath a grammatical surface. This would ultimately lead scholarship to consider that the enduring significance of language is not outside of the thought, but within it -- not in what the words say, but in what is said between them.

But in 1926 a different note was sounded. Felix Grösser, who also seemed unaware of the Cirencester find, presented a hypothesis in direct disagreement with the reserved datings of the square by other German experts. Also, he forwarded a prediction of its later discovery in definitely Roman surroundings (Grösser, 1926). The Grösser hypothesis recognized the rotas square as more than a simple magic square: it was also a cryptogram concealing a remarkable cache of symbols secreted within a deceptive, cosmic verse. When the grid of the square is disassembled and its letters are laid out in series, they may be recom-bined to form the words Pater Noster twice over. This recombinant mélange of letters affords but one N, thus Grösser decided that the resulting form of the secreted message must be of a cruciform arrangement, recalling the Two A's and unused. The reciprocated Pater Noster, accorded with the beginning of St. John the Evangelist: "I am the Alpha and the Omega, the beginning and the end." The rotas square, then, lauds a significant Christian God. This led him to ask: what is the nature of the secreted symbols? And that the solution is a secret secreted within a verse of the magic square? Perhaps the ordinary magic square is a symbol beyond metrics: it is a palindromic square extended by its lettered boundary on either side, secreted within a square of the Roman Empire, and the logic and history of its find is that which Grösser did not see.

Thus, Grösser believed that the magic square had a symbolic meaning beyond metrics, and that the rotas square was a palindromic square secreted within a deceptive verse: Pater Noster. This hypothesis was a radical departure from the chronological and linguistic traditions of the square's origin. But it was Grösser to conclude that the rotas square was a Roman artifact, that the rotas square was a Christian artifact, and that the rotas square was a Roman Christian artifact (Grösser, 1926). As a support of the Grösser hypothesis, Rostovtzeff (1936) had argued that the Cirencester find should not be dismissed as an artifact of the early Christian period. The story of the rotas square and its implications for the understanding of the Mediterranean world in the first four centuries of the Christian era thus remains a mystery, for it is a story of the rotas square and its implications for the understanding of the Mediterranean world in the first four centuries of the Christian era.
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Two A's and two O's remain unused. These he places at the extremities of the dissim­
ulated Pater Noster cross in accordance with the Revelation of St. John the Divine (1:8):
"I am the Alpha and Omega, the beginning and the ending."

The rotas square was to Grösser, then, laden with signifi­
cant Christian symbolism.

This led him to enunciate the view that a Christian origin was certain, and that the square was most probably invented during a time of persecu­
tion as a secret sign by which believers could recognize each other without revealing their identity as Christians. It was from this recognition of the magic square's virtues of protection against religious persecution that Grösser estimated further discoveries within contexts firmly Roman, thus, Grösser believed he had revealed circumstances of the rotas magic square which demonstrate its particular role as communication beyond metrical dress and surface grammar. The intended meaning of the square is imbedded further within it than its epigraph extends. Its palindromic structure dissimulates its significance, or the message intended by its bearers, and a comprehension of its true meaning is depend­ent on either some sort of initiation into its mystery, or a penetrating insight such as Grösser's. And although the intended functional role of the square as language is yet to be proven with hard facts from archae­ology and history, what better way to signify the mystical presence of a god that is the beginning and the end, the Alpha and the Omega, than with the recurrent symmetry of a palindromic verse where any beginning can be its end?

Within seven years Grösser's hypothesis was confirmed. In 1933 archaeologists digging at Dura-Europos in the Syrian desert found the first of four more examples of the magic square, all beginning with ro­
as, and in a city of Roman occupation (Rostovtzeff, 1934; Rostovtzeff, 1936). As a result, the scholarship came out in almost unanimous sup­port of the Grösser article, citing the discoveries as proof of a definite Roman environment for the square and finding grounds for agreement on early Christian influences in its creation. Dornseiff, in fact, wrote to Grösser to congratulate him on his interpretation, accepting it openly (Rostovtzeff, 1934). Thus, it appeared at last that the magic square had been subdued and its mystery plumbed, a fact accomplished not by its translation but through a recognition of the mystical significance locked within its palindromic structure. The recurrent symmetry of the rotas verse seems to have been intended to signify the concept of a Pater Omnipotens Aeterna Deus and the mystic interconnectedness of things thus brought about, at least for the vision of the early Christians who appear to have been its creators. And what a consolation it must have been for desperate times, a salve against the jagged fear of fugi­
tive days and nights.

The story of Dura had been an intriguing one, and it had added great-
ly to the modern understanding of the early mysticism of the Christian church. Discovered at a site near the middle of the Euphrates River, at the junction of the north-south desert route which lay alongside the river and a dusty road that stretched westwards toward Palmyra, it was a city from the lands of King Solomon. Its ruins had been excavated from the banks of the Euphrates and the blowing Syrian sands by French and American expeditions between 1920 and 1937. The city itself had probably been established by the Seleucids at the end of the fourth century B.C., and it appears to have fallen to the sacking of the Sassanians around the year 256 A.D. Dura-Europos was laid out on a grid system, and its inhabitants worshipped many deities and spoke many tongues, judging from the tremendous variation in archaeological artifacts. Unearthed were temples to the Palmyrene gods Artemis, Megistos, Mithras, and others which had for centuries been the solitary guardians of many frescoes, reliefs, papyri, and scrolls rich in the lore and symbolism of a culture abruptly cut short near the end of the third century A.D. Perhaps the rarest discovery was that of the earliest Christian church ever uncovered, proudly displaying a figure of Christ as the Good Shepherd above its crumbling baptistry (Wright). A synagogue was also uncovered, with a series of frescoes depicting scenes from the Old Testament.

Dura had been manned by an auxiliary cohort of troops under the direction of a Roman actuarium during its last vibrant century. Three of the four magic squares were found on the walls of this actuarium office. Thus, in all probability the square was made under the hand of a Roman soldier, most likely an educated one, for the square appears in close vicinity with an inscription that is a fragment of a line from Virgil. The evidence further suggests that it was the soldiers of the various Roman garrisons who carried both the square and the early mystic and persecuted Christianity to the extremes of the Roman Empire, as they had done with Mithraism a century before (Carcopino, 1953-1965). The origin of the rota magic square could then be dated roughly in correspondence with the various persecutions of Christians during the years immediately following the death of Jesus of Nazareth, but it would be difficult at this point to be any more specific than perhaps the two centuries which separate the crucifixion and the fall of Dura. Certain French writers have, however, ventured more precise estimates, naming not only a place for its creation but also an author. The distinguished French scholar Jérôme Carcopino and others have thought that the rota square takes its source from St. Irenaeus of Lyon, who created it for the needs of his terrorized congregation in the Rhone valley of southern France, whose fate it had been to be thrown to wild beasts in the arena during the festival of the imperial cult in the summer of 177 A.D. (Carcopino, 1953-65; Daniélou, 1961).

The year 1935 saw the publication of Guillaume de Jerphanion's very persuasive and thorough article on the mystic Christian symbolism and origin of the square, combining old theories with new facts. Convinced by the archaeological record at Dura and Cirencester, he supported the Grösser hypothesis with an exhaustive collation of evidence. The conclusions at which he arrived are easily regarded as monumental, and they went far beyond the poetical exegesis and translation offered by

Wescher in 1929, and the scholarship in historical and etiological information. The archaeological evidence, however, as was out, new data was presented further into the fragments firmly placed on the point of language...
Christian River, beside the nyra, it had been excavated by the city it­
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But this history does not merely trace the outlines of an obscure us­
age of language symbolism or an unlikely verse form. Language is a ret­
rospective project: a history of the meanings which have been rendered
gestural, spoken, and literary forms is a landscape of sepulchres
and their entombed significances which, with every human utterance,
are brought to bear on present meanings. The widespread occurrence of
the rota square throughout the classical and medieval worlds allies itself
historically with other magic squares around the Mediterranean to sug­
gest a common symbolism, which the process of time has worn away.
In order to better know our language as a tradition, as a way of grasping
reality, the key to this lost symbolism must be restored so that we may
understand how we were once touched by the meaning which lay between
words. Without this, the references achieved by such symbolisms shall
forever move anonymously along their shifting paths within the main­
stream of language, which is in a way our common memory.

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Weschcer in 1874. Jerphanion brought the weight of sixty more years of
scholarship on the rota square, including an entire library of archaeo­
logical information, to bear down on his conclusions making them stick.
The archaeological record tended to support a meaning derived from the
intaglio structure of the square, and not from its superficial grammar.
However, neither of the two writers was long in favor. Before the year
was out, new discoveries would come to light that would discredit the
dating given the origin of the square by Jerphanion, drawing that date
further into the past and finally into obscurity. These further develop­
ments firmly bind the rota square to a much larger, literary tradition
of palindromes which recedes at last into prehistory and the vanishing
point of languages.