

9x9 WORD SQUARES

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Anyone who has tried to construct a regular word square of the ninth order will understand why there have been so few good examples ever exhibited. The building of large squares flourished in the first half of the twentieth century; according to the Sherlock Holmes memorial issued by the National Puzzlers' League in June 1980, a little more than one thousand 9x9 squares were published between 1897 and 1979. However, nearly all of these squares contain a high percentage of undesirable terms, such as obsolete, foreign and dialectic words, long-forgotten place-names, questionable adjectival inflections, and two-word terms. Out of all the 9x9 squares that have appeared over the years, only three were considered worthy of inclusion in Dmitri Borgmann's classic text, Language on Vacation (Scribner's, 1965). Probably the finest of these is attributed to Wayne Goodman of Chicago, who died in 1940.

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F R A T E R I E S
R E G I M E N A L
A G I T A T I V E
T I T A N I T E S
E M A N A T I S T
R E T I T R A T E
I N I T I A T O R
E A V E S T O N E
S L E S T E R E D

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This square contains seven words in Webster's New International Dictionary, Second Edition (Web 2). RETITRATE, to redetermine the strength of a chemical solution, is found only in the Century Dictionary Supplement (1909), and EAVESTONE, a small community in Yorkshire, England, is listed in most large British gazetteers, such as the Survey Gazetteer of the British Isles (1943).

At the time Borgmann's book was published in 1965, there was only one 9x9 square known that used all dictionary words -- it was constructed by the master formist Rufus T. Strohm, of Centre Hall, Pennsylvania, who was editor of the Enigma magazine from 1923 to 1953. This square, given at the top of the next page, contains seven words taken from the Oxford English Dictionary (OED). Unfortunately one of them is a two-word term -- REED SEDGE, an obsolete synonym for 'reeds' STAMACHED (stomached) appears in the English Dialect Dictionary, and LITHOBIID, a kind of myriapod or arthropod, in Web 2.

I S O S C E L A R
 S A R T O R I T E
 O R G A N E T T E
 S T A M A C H E D
 C O N A C T O R S
 E R E C T A B L E
 L I T H O B I I D
 A T T E R L I N G
 R E E D S E D G E

There is a certain aesthetic charm about these massive squares, but their construction seems to be a dying art. Palmer Peterson, acclaimed as the premier formist at the time of his death in 1979 (see the February 1980 Word Ways for a tribute to this man), had only 14 9x9 squares published in the Enigma magazine from 1970 through 1979. During the same period, the Enigma published a total of two other 9x9 squares, both by Noble Holderread of Milford, Indiana, now the only surviving National Puzzlers' League constructor of squares this large.

It was with some apprehension that I started searching for a new 9x9 square, and after several weeks of strenuous effort only one reasonably close attempt had come to light.

S O R P L I S E S
 O V E R E N A G E
 R E C A P T U R E
 P R A C T I C E R
 L E P T O T E N E
 I N T I T U L E S
 S A U C E L L E S
 E G R E N E S S E
 S E E R E S S E S

Unfortunately this square contains one serious flaw. The word OVERENAGE, to 'enage' to an excessive degree, is contrived. Although a fairly logical combination of the prefix 'over-' and the verb 'enage', the term OVERENAGE does not appear to exist. However, the remaining eight words in the square are perfectly legitimate. Six of them appear in Web 2, and the other two in the OED -- SORPLISES is a fifteenth century form of 'surplices', and EGRENESSE is shown as an early spelling of 'eagerness' in a 1589 quotation.

After many weeks of further work, I finally hit upon a complete 9x9 square.

E P I S T A S I S
 P E N T O N E N E
 I N T E S T A T E
 S T E N C I L E R
 T O S C A T E R E
 A N T I T E R M S
 S E A L E R I E S
 I N T E R M E T E
 S E E R E S S E S

- EPISTASIS suppression of a secretion or excretion (Web 2)
 PENTONENE a hydrocarbon of the formula C₅H₆ (OED, under 'pentane')
 INTESTATE without having made a valid will (Web 2)
 STENCILER one who stencils (Web 2)
 TO-SCATERE a variant of the obsolete verb 'to-scatter', to disperse (OED, 1382 quotation)
 ANTI-TERMS plural of 'anti-term', a counterterm, used in the February 26, 1966 issue of the New Yorker magazine, on pages 30-31: 'They have progressed to the mysterious and illegitimate state of 'complexes', which my Cartesian education would suggest is not a term at all but the anti-term par excellence'
 SEALERIES seal fisheries, places where seals are hunted (Web 2)
 INTERMETE variant of 'entermete', to take part, or have dealings (OED)
 SEERESSES female seers, prophetesses (Web 2)

A remarkable, perhaps unique, feature of this 9x9 square is that it has three variants. INTERMEDE, an interlude (OED), can be substituted for INTERMETE. EPISTASIS can be replaced by its plural EPISTASES (Webster's Third Edition), which gives ENTERMETE instead of INTERMETE. Finally, EPISTASES can be replaced by EPISTATES, an overseer (OED), which changes SEALERIES to TEALERIES, places where teal are kept and fattened (OED).

Of course the dream of the 9x9 constructor has always been to find a square using only solid-form, uncapitalized words, drawn from a single reference. I returned to the murky depths of the Oxford, and after many more hours of wearying research emerged with the following near-solution.

O P U S C U L E S
 P E N T O N E N E
 U N S E N S A T E
 S T E F F A D E R
 C O N F E T E R E D
 U N S A T I R E S
 L E A D E R E S S
 E N T E R E S S E
 S E E R E S S E S
 D

- OPUSCULES literary or musical works of small size
 PENTONENE see previous square
 UNSENSATE without feeling, insensate
 STEFFADER a fourteenth century form of 'stepfather'
 CONFETERED variant of 'confedered', united in alliance
 UNSATIRES deprives of satirical quality
 LEADERESS a female leader
 ENTERESSE a fifteenth-sixteenth century spelling of 'interest', legal concern, title, or claim
 SEERESSES see previous square

There is one variant -- STEFFADER can be replaced by STEPFADER, another fourteenth century spelling of 'stepfather'.

Is it possible to eliminate the D from CONFETERED? Yes, almost certainly! Under the verb 'confeder' in the OED there appears a c1368 quotation from Chaucer's Compleynte unto pite (Complaint to pity):

'Confetered both by bonde and assurance'

This is an odd version of the line usually written 'Confedred both by bonde and alliaunce'. Could the present tense of this verb have been spelt confetere by medieval scribes?

The form confedere is shown in a 1485 citation from The lyf of Saynt Wenefryde, by Caxton:

'... to confedere the myndes and courages of these men unto them'

According to the Oxford, the spellings 'confeder' and 'confeter' were both current during the fourteenth, fifteenth and sixteenth centuries, so if confedere was used for 'confeder' it is reasonable to assume that confetere existed as a scribal variant of 'confeter'.

Hopefully this article may rekindle interest in large word squares. Remember, the supreme challenge still remains! No one has really come close to building a 10x10 without using tautonyms, although an interesting computer-generated effort appeared in the February 1977 Word Ways. There must be hundreds of thousands of ten-letter words -- surely the construction of a regular 10x10 square is not beyond the realms of possibility.