

A WORD SQUARE UPDATE

MAXEY BROOKE
Sweeny, Texas

In 1974, I sent the editor a home-made Christmas card summarizing most of what was known about word squares to that time. To my surprise, he published it as "A Survey of Small Squares" in the May 1975 *Word Ways*, along with several additions for which he gave me credit.

This article proved to be a sort of watershed for word squares. During the previous seven years, *Word Ways* had published just one word square article and four or five items in Colloquy or Kickshaws. In the following eight years, seventeen word square articles have appeared.

In the 1975 article, 13 types of word squares were described: bordered, cubic, cyclic, diagonal, double, Latin, magic, pig Latin, palindromic, progressive, reversible, sequential and symmetrical. Since then, three more types have been devised.

SHIFTED WORD SQUARE

B A R E	O N E R	In the May 1979 <i>Word Ways</i> , Tom Pulliam presented the pair of word squares shown at the left. The first square is changed into the second by shifting each letter along the alphabet thirteen spaces.
A N E R	N A R E	
R E N A	E R A N	
E R A R	R E N E	

TILE SQUARE

X W R N J	In the August 1980 <i>Word Ways</i> , Ed Pegg constructed a word square of 25 different letters in which every subsquare of four letters forms a word. For example, the subsquare of letters in the upper left corner can be arranged to spell waxy , the next subsquare to the right spells braw , and so on to the subsquare in the lower right corner which spells dove .
Y A B U K	
M L H C P	
S I T E O	
Z G F D V	

HOLLOW WORD SQUARE

G R A S P	R A D I S H	They are just that - word squares with holes in them. Note that the first is a progressive word square if a P is placed in the center. These squares are mine, published here for the first time.
R A S P E	A V E N U E	
A S E N	D E E R	
S P E N D	I N D E	
P E N D S	S U E D E S	
	H E R E S Y	

In 1979, Philip Cohen and Ross Eckler issued a series of *Word Ways* challenges. This was, in effect, a summing-up of unanswered logological problems. One of these was to produce a 6x6 univocalic double word square.

STRESS Shortly after this challenge was issued, an answer was published in the May 1979 issue of *Word Ways*. This square, presented at the left, was devised by Jeff Grant.

TRESTE
RESSSES
ETTERS
STEERE
TERSEES

MACOMADA My 1975 article gave an example of a 5x5 symmetrical bordered square. In the February 1980 *Word Ways*, Philip Cohen presented a much earlier 8x8 word square by Palmer Peterson, "the world's foremost formist," which can be successively peeled down to a 6x6, a 4x4, and a 2x2 word square.

AMANAGES
CASELESS
ONENESSE
MALETTES
AGESTENS
DESSENDE
ASSESESED

WHICK In 1975, the maximum number of different letters forming a 5x5 double word square was 18. Jeff Grant increased this to 22 different letters in the May 1979 issue of *Word Ways*. The square containing 25 different letters continues to elude us.

ROBYN
AFIVE
MUZED
PLATS
BASH A 4x4 double word square containing 16 different letters was also given in 1975. In the November 1980 *Word Ways*, Jeff Grant discovered two squares of this type using more common words. To generate the second square, replace B with G, and G with D.

RULY
ITEM
GOWN
SAD Finally, I show at the left the commonest-word example of a 3x3 double word square with all letters different presented in the February 1980 *Word Ways*.

PRO
YET
SEEST A 4x4 double word square using only three different letters was known in 1975. We now have a 5x5 double word square using only three different letters; see the August 1979 *Word Ways* for definitions of the various words.

TESTE
ESSEE
TEETS
ESSTE
And that is the situation to date. What will the next eight years bring?

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QUERY

Paul Dickson (Box 80, Garrett Park MD 20896) is collecting jokes in various categories: knock-knock jokes, shaggy dog stories, atrocious puns, answers to "What is black and white and red all over?", answers to "How many ----s does it take to screw in a light bulb?", comebacks to the complaint "Waiter, there's a fly in my soup", Aggie jokes, etc. He will give full credit for any contributions used, in a book tentatively entitled Waiter, There's an Elephant in my Soup.