

# DOUBLE WORD SQUARES

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Regular word squares have the same terms across and down, whereas double word squares have different ones. Examples of both types at the relatively simple four-letter level are shown below.

W O R D	W O R D
O B O E	A M I R
R O S S	Y I P E
D E S K	S T E W

A large number of regular squares have been exhibited in *Word Ways* over the years, but comparatively few doubles have appeared. Generally, double squares up to magnitude 6x6 are only of interest when they have a particularly noteworthy feature, as in the three following.

Q A Z I	S E E S T	F J O R C K
E J O O	T E S T E	L U V I A N
R A N N	E S S E S	A D E P T I
E X E S	T E E T S	G E R M A L
	E S S T E	H O B A L L
		T W Y N E S

The 4x4 square contains the difficult letters JQXZ. All words are uncapitalized and seven of them appear in Webster's Second Edition (Web 2), the exception being QAZI, a variant of 'qadi', a Muslim judge, in Webster's Third Edition (Web 3). In case you didn't know, an EJOO is a Malayan feather palm, a RANN is an Irish verse, a QERE is a marginal notation in the Hebrew bible, and AJAX is jocular for 'jakes', a privy.

The double 5x5 square first appeared in the Colloquy section of the August 1979 *Word Ways*. It uses only three different letters and all words can be found in the Oxford English Dictionary (OED).

The 6x6 square appeared in "Word Squares Using Many Letters" in the February 1980 *Word Ways*. It draws from three different dictionaries and uses 23 different letters, omitting only QXZ.

The best double 7x7 square I have seen was constructed by Palmer C. Peterson (with the nom 'Sherlock Holmes' in the National Puzzlers' League). Published in 1972 when he was seventy, this remarkable square uses only words found in Web 2.

Sherlock's square is shown at the left on the next page. The other is one I found recently, which contains uncapitalized dictionary terms only. Eleven of them are taken from Web 2 or Web 3, while AMENITE, DESYSTE and DESESSE are old forms of 'amenity',

M A R A R I E	R E L A C E D
I D O L I N G	E X A L A T E
S E M E N C E	P A G O D A S
A L A R G E S	A M E N I T E
V I N C E N T	C I N E S I S
E N C E N S E	E N D L E S S
R E E S T E D	D E S Y S T E

'desist' and 'disease' listed in the OED. It should be possible to produce more single-source double squares of this order with the aid of a computer. Is anyone willing to give it a try?

The double 8x8 square is reckoned to be about as hard as a regular 9x9 square to build, and ten times harder than a double 7x7 square. Sherlock's production of double 8x8 squares (at least 24 to my knowledge) was dwarfed by a prolific output of regular niners. Does this perhaps imply that double eights are in fact more difficult to construct, or was the master formist simply more interested in the larger squares? It is worth noting that the first of Sherlock's lifetime record 250 9x9 squares was published in the *Enigma* in November 1928, whereas he devoted an article in the September 1934 edition to his attempts (all failures) to construct a double 8x8. Later, of course, he succeeded, as witness the following square published in November 1953.

B A B A M A M A
U D A R I V E R
N O R I S I N G
T E N T M A T E
I N S T O R E N
N A T I V I S T
G R O N E S S E
S A N G S T A R

The BABAMAMA Range (location unknown) is listed in Stieler's Atlas, a 19th century work, Siberia's UDA RIVER appears in the old Century Atlas, and NORISING comes from 'norise', below the line in Webster's First Edition (Web 1) as an obsolete variant of 'nourice', which means 'nurse' or 'to nurse'. INSTOREN is shown in the etymology of 'enstore', to restore or renew, in the Century Dictionary and Cyclopaedia, GRONESSE Castle, a fort in Jersey just northwest of St. Helier, is in Worcester's Biographical Dictionary of Universal Gazetteer, Ancient and Modern (1823), and SANGSTAR is an early form of 'songster' in the OED. The Geographical Section of Web 1 lists ADOENARA as a Dutch version of Adunara, an island east of Flores in the Dutch East Indies, BARNSTON appears in the Century Atlas as a town in Nebraska, ARITTING is from the verb 'aritte', shown as a variant of 'arret', to reckon, in the Encyclopaedic Dictionary (1894), and MENTESSA is a town in Spain, listed in Lempriere's Classical Dictionary, originally published in the 1800s. The other six terms all appear in Web 2.

My own attempts at the double eight have been frustrating, very reminiscent of regular 9x9 square construction. Time and again a promising base was developed to within one reasonable-looking term of a completed square, and every time that particular

combination proved non-existent. At one stage I sent a list of around 70 possibilities to Murray Pearce, any of which would have led to a solution. Even with his extensive collection of reverse alphabetical lists, not a single term could be found. Nevertheless, after many months of searching, all my efforts were rewarded when an excellent double 8x8 square at last came to light. Only dictionary terms are used, and by an incredible coincidence (or was it fate?) the word TENTMATE occurs in both my square and Sherlock's! Surely the odds against such an unplanned duplication must be astronomical.

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

- TRATTLED past tense of 'trattle', a Scottish term meaning to prattle, chatter or gossip (Web 2)
- HEMERINE of or belonging to a day, a medical expression, sometimes used of a fever that recurs daily (OED)
- APOTOMES in Greek music, intervals of a semitone in the Pythagorean scale (Web 3)
- METAPORE the foramen of Magendie, a passage through the midline of the roof of the fourth ventricle (Web 2)
- NAILINGS plural of 'nailing', a fastening with nails, nail-making; also slang for an act of 'nailing', or catching someone (OED)
- ALOISIAS individuals named Aloisia, a feminine form of Aloysius occurring in the 16th and 17th century in parish registers of Hinton Charterhouse, England (The Oxford Dictionary of English Christian Names, 3rd Edition, E.G. Withycombe, 1977)
- TENTMATE an associate in a tent (Web 2)
- ASSESSED fixed or determined the rate or amount of (Web 2)
- THAMNATA a city assigned Joshua as an inheritance and burial place, referred to in 1st Maccabees 9:50 in the Apocryphal Old Testament, and appearing in the Douay Bible (Web 2)
- REPEALES an early form of 'repeals', revokes, rescinds, annuls, as in the following 1625 citation 'The Parson repeales his former sentence' (OED)
- AMOTIONS plural of 'amotion', removal of a specified object from a place or position (Web 3)
- TETALITE a variety of calcite near spartaite, containing about nine per cent of carbonate of manganese (Dictionary of the Names of Minerals, A.H. Chester, 1896)
- TROPISMS natural inborn inclinations (Web 3)
- LIMONIAS an old name for either of the small long-leaved orchids *Serapias longifolia* or *Cephalanthera longifolia* (A Dictionary of the Flowering Plants and Ferns, 8th Edition, J.C. Willis, revised by H.K. Airy Shaw, 1973)
- ENERGATE a rare obsolete term meaning to energize, or give energy to (OED)

DESESSED past tense of 'desesse,' a 16th century form of the verb 'disease', to deprive of ease (OED)

In 1972 Sherlock wrote, 'What are the possibilities of making a double 9-square? Nil! Absolutely and positively nil!' How hard did he try, I wonder? It is certainly a most emphatic statement from the formist many consider the greatest of all time. Sherlock also doubted that a regular 10x10 square was achievable. Such a square, admittedly not perfect (*Word Ways*, November 1990) has been constructed, so maybe, just maybe, a double 9x9 square is not completely beyond the realms of possibility.

My thanks to Murray Pearce and Hardy Ropes for their help in checking old reverse lists, and providing sources for some of the more obscure terms in this article.

### *FIFTY YEARS AMONG THE NEW WORDS*

*This is the title of a \$60 257-page book edited by John Algeo and published by Cambridge University Press in 1991, to celebrate fifty years of the column "Among the New Words" in the quarterly journal American Speech. It contains not only the original columns photographically reduced (a little too much for the editor's aging eyes to browse comfortably), but also an alphabetic index of all neologisms (with brief definitions) and an extensive introduction describing how neologisms are formed (creating de novo, borrowing from other languages, combining two words, shortening by clipping or acronymy, blending = combining + shortening, and shifting of form, grammar or meaning). The purpose of the American Speech column was to include those words not yet appearing in dictionaries. Many old standbys (sitcom, New Age, teenager) were captured by the journal's editorial board along with a fair number of neologisms that never made it: how many readers have heard of blimpcasting, lurgy lurgy, uraniumaire, cafetorium or dandelioneer? Nevertheless, this work offers a fine overview of popular culture since the Second World War, a "documentary report of the chief public preoccupation of each decade."*