THE BEST TEN-SQUARES

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It is nearly 85 years since the first ten-square was published. American National Puzzlers’ League member Paul M. Bryan (Tunste) exhibited a tautonymic square in the September 1921 Enigma. The example was not perfect, however, with one word (ALALA) being arbitrarily doubled. Furthermore, as tautonymic ten-squares use only five different words, each in two positions, they are not true solutions to the challenge. Over the years additional tautonymic ten-squares have been devised, the most meritorious being one using seven different words instead of the usual five, constructed by master logologist Dmitri Borgmann (Language on Vacation 1965; “Ars Magna: The Ten-Square”, WW Nov 1985).

The first published attempt at a computer-generated ten-square was Frank Rubin’s ACCOMP-LISH example (“A Near-Miss 10-by-10 Word Square”, WW Feb 1977). This ‘square’ contains eight dictionary words (one hyphenated) plus two ‘gibberish’ combinations. Unfortunately, his computer was not able to improve on this effort. Some squares have been found, most notably by National Puzzlers’ League member G. Hardy Ropes (Ajax), Ted Clarke, and myself, which include contrived phrases like SAHO DISHES, NONES EVENT and OPEN NERINE. Like tautonymic squares, these are not considered acceptable by most serious formists.

Surely the way to success was now clear! With a large database of ten-letter words and a computer programmed to search for squares, it was thought that a solution was just around the corner. In fact, the task proved much more difficult than imagined.

The years went by with no significant advance using computers. Meanwhile, I pressed on with manual methods, constructing firstly the MISSATICAL square (“Ars Magna: The Ten-Square”, WW Nov 1985), the ASTRALISED square (“In Search of the Ten-Square”, WW Nov 1990) and the DISTALISED variant (“A Modified Ten-Square”, WW Feb 2002). They were a definite improvement on earlier efforts, but there were still flaws, with the use of foreign terms and personal names pluralised.

After nearly forty years chasing the elusive ten-square, a breakthrough came with the FISCALISED square (“A Further Modified Ten-Square”, WW Nov 2004), which I consider my finest achievement in the field. It is certainly the best ten-square devised without the aid of a computer program. Recently I have updated the information for some terms.

F I S C A L I S E D
I M P O L A R I T Y
S P A L A C I N E S
C O L D N O S E R S
A L A N B R O W N E
L A C O R A L I N A
I R I S O L O N E S
S I N E W I N E S S
E T E R N N E S S E
D Y S S E A S S E S
**FISCALISED** variant of *fiscalized* [Web 2, F&W, OED], subject to fiscal control; taken charge of or managed as a source of revenue.

(Mr Broughton) I would take the view that sale of tobacco should be fiscalised, in the same way as other similar products [The UK Parliament, Select Committee on Health, Minutes of Evidence, 27 Jan 2000 (Net)]

But industry sources would dismiss as “rubbish” his suggestion of water content in fiscalised oil sales [Rumours of Looted Oil, Trinidad & Tobago Express, 29 May 2005 (Net)]

**IMPOLARITY** lack of polarity, particularly non-expression of opposite emotional extremes, absence of mood swings; a rare technical term in behavioral psychology.

This battery of tests will emphasize those functions shown to be impaired on an empirical basis (problem solving, abstraction, linguistic ability) and theoretical basis (behavioral self-regulation, impolarity, shift of set, sustained effort, and attention) [An Identical Twin High-Risk Study of Biobehavioral Vulnerability. M.T. Tsuang and M.J. Lyons, NIDA Monograph 159, p 99 (Net)]

The word also appears in the third verse of a mystical poem entitled ‘It Is Just That Lotus’, where it means something like *disunity* or *imbalance*:

Then it appeared in the Lotus Pool  
From The Impolarity to the Grand Polarity  
And it became unlimited at last [Net]

**SPALACINES** blind mole-rats of the subfamily Spalacinae [F&W].

Whereas bathyergids and spalacines are truly subterranean, other named rodents may also forage and disperse aboveground [Are naked and common mole-rats eusocial and if so, why?, H. Burda, R.L. Honeycutt et al, Behavioral Ecology and Sociobiology, Vol 47, no. 5, Apr 2000]

To date, genuine fossil spalacines have still not been recovered from China [Middle Pliocene Micromammals from the Tianzhu Locality (Gansu Province), S. Zheng, Vertebrata PalAsiatica, Vol XX, no. 2, Apr 1982]

**COLDNOSERS** slang for hunting dogs that follow cold trails.

How he did it is common sense: he took the coldnoser out with his hottest nose dog and stayed with him constantly before the race started [www.americanbeagler, The American Beagler Forum, 28 Nov 2003 (Net)]

In mining, a *cold noser* is the same as a wildcatter, a person or company devoted to exploration in unlikely areas [Dictionary of Mining, Minerals and Related Terms, US Bureau of Mines, 1996].

**ALAN BROWNE** an American bank consultant, 1908-1988 [Who’s Who in America, 45th edition, 1988-89]. There are men named Alan Browne listed in many telephone directories and other references throughout the world. Some well-known ones are an English borough councilor, an American screenwriter, and an Irish hurling player.

**LA CORALINA** a locality in the Pinar Del Rio province, western Cuba [NIMA]; also, a small luxury townhouse complex in Coral Ridge, Fort Lauderdale, Florida [Net].
IRISOLONES plural of *irisolone*, an estrogenic compound derived from certain irises [Handbook of Phytochemical Constituents of GRAS Herbs and Other Economic Plants, James A. Duke, 1992]. Dr Trevor Kitson of the Institute of Fundamental Science at Massey University, New Zealand, states that if a chemist made irisolone synthetically in a lab he might say ‘the synthetic and natural *irisolones* proved identical in every detail’.

SINEWININESS the state or quality of being sinewy; firm strength [OED].

ETERNNESSE variant of *eternness*, eternity.

What impossible mixtures? Vice and vertue, corruption and eternnesse [OED, 1608 quot.]

DYSSEASSES plural of *dysseasse*, a 16th century form of the noun *disease* [OED].

In the past few years, English wordsmith Rex Gooch has produced many computer-generated ten-squares, including a couple composed entirely of place-names from the National Imagery and Mapping Agency database (“Ten-Square With Place Names”, WW Feb 2003), a somewhat flawed OED-only specimen (“Hunting the Ten-Square”, WW May 2004), and ones with headwords starting with every letter (“An A to Z of Ten-Squares”, WW Nov 2003).

In my opinion, the best ten-by-ten yet discovered is Rex’s DESCENDANT square (“Some Superior Ten-Squares”, WW Nov 2002), which contains seven dictionary words (one capitalized, one hyphenated), two place-names and an insect species name.

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DESCENDANT
ECHENEIDAE
SHORTCOATS
CERBERULUS
ENTEROMERE
NECROLATER
DIOUMABANA
ADALETABAT
NATURENAME
TessERATED
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DESCENDANT one descended from an ancestor; issue, offspring [OED].

ECHENEIDAE the remora family of fishes, which have on top of their heads a sucking disc with which they attach themselves to sharks, ships, etc. [Web 2].

SHORTCOATS people wearing short coats.

There was a strong feeling against the shortcoats [OED, 1847 quot.]

CERBERULUS in ‘Camponotus cerberulus’, a species of ant [Integrated Taxonomic Information System. US Department of Agriculture (Net)]. Camponotus is the largest genus of ants in the world with over 1,500 species and subspecies.

ENTEROMERE any segment of the embryonic alimentary tract [Dorland’s Medical Dictionary, Web 2 (under entero-, not defined)].
NECROLATER someone who worships the dead or dead bodies [Chambers Dictionary, 1998].

DIOUMABANA a populated place in eastern Guinea, West Africa [NIMA].

ADALETABAT a populated place in the Mus province, eastern Turkey [NIMA].

NATURE-NAME a toponym (place name) embodying an allusion to a natural occurrence or geographical feature [OED].

TESSERATED rare variant of tessellated, composed of small blocks of variously coloured material arranged to form a pattern [OED].

The ten-square challenge has essentially been solved. All that remains is to find better examples, using more common terms. A square containing only modern, solid-form dictionary words is the ultimate goal, but I suspect it will remain an impossible dream.

References

F&W Funk & Wagnalls New Standard Dictionary, 1946
Net The Internet, Google search program
NIMA National Imagery and Mapping Agency database (Net)
OED Oxford English Dictionary, 1989
Web 2 Webster’s New International Dictionary, 2nd edition, 1934
WW Word Ways