## NUMERICAL PALINDROMES: PART 1

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At first sight, RESEDACEAE (the plant family to which the mignonette belongs) is not a palindrome. But it is--in disguise! When its ten letters are split into two equal groups of five letters each, and the letters assigned the values A=1, B=2, ... RESED- totals 51 whilst -ACEAE totals 15. RESEDACEAE can thus be written 51.15 which is a numerical palindrome. The Romanian anatomist and surgeon, Dumitru GEROTA (12.33.21) and that useful garden tool, the WIDGER (32.11.23), are also numerical palindromes, but ones in which the word has been split into three equal groups of letters. Thus, assigning A=1, B=2, ... a numerical palindrome can be defined as a word which, when split into n groups each having the same number of letters, and the letter values of each group totalled, provides a number series whose digits read the same backwards as forwards. Here, however, I concentrate exclusively on splitting words (and phrases) into two groups (n=2) each of which consists of two digits.

As a genre, numerical palindromes have largely escaped the attention of Word Ways although EMBOLISM (35.53) was mentioned as such in "All Words Are Interesting" by Pamela Brang in the August 1977 issue. The current item seeks to redress this situation, not least because their counterparts, the numerical tautonyms--words such as MICROPHONE (58.58)--have long since received extensive coverage; see Leslie Card's "Six-Letter Numerical Tautonyms" in the November 1970 Word Ways, and "Eight-Letter Numerical Tautonyms" in the August 1971 issue. Incidentally, some words can lay claim to being both numerical palindromes and numerical tautonyms. These include CHEF (11.11), RACIAL (22.22), SAMPLE (33.33), CUTEST (44.44), SOURLY (55.55), INTERLOPER (66.66), GYNO-PLASTY (77.77), STEPMOTHERLY (88.88) and TRANSVERSARIUM (99.99).

GAMBIA (21.12), HISPANIA (52.25) and COPENHAGEN (53.35) are all palindromic locations. SAMANTHA (34.43), FERNANDO (43.34), APPLETON (45.54) and CONRAD (32.23) are palindromic names. So is PANDORA, but only when she is in her Box-possessive mood: PANDORA'S (35.53). Descartes had palindromic aspirations too. He said "I think, therefore I am". But he wasn't. Short of an E, he could only contribute towards DESECRATES (36.63), his andagram!

Numerical palindromes boast a sequence of superlatives. BARN-, BUFF-FOAM-, FOGG-, MANG-, PECK-, SCAL-, SEDG- and TACK- each accommodate -IEST (53) to make (35.53). Similarly, the -OLOGY (74) set ACTIN-, FEMIN-, MONAD- and REACT- ea ch make (47.74). The double letter delights KUUANT (53.35) and PUDDEE (41.14), the UOIEA-word UNOCCIDENTAL (65.56) and UN-AMERICAN (54.45) are all numerical palindromes. So is the plant DECABELONE (15.51), one of the few words whose first five letters are ABCDE (DEBACLE is another). REACTS and its transposal CATERS not only share the same letters but also the same palindrome. But they cleverly use different combinations of letters (REA,CAT and CTS,ERS) as the basis of their common palindrome (24,42).

The synonyms KID (24) and BOY (42) are, appropriately, numericallypalindromic synonyms as well. And they nicely serve to bridge the gap between numerically-palindromic words and phrases, for there is no reason why a search for numerical palindromes should be confined to single words. In these phrases, the two equal-length words form the two numerical halves of the palindrome:

CARD VOTE 26.62	OLD AGE 31.13	PEACH MELBA 33.33
DARK BOGS 34.43	HIND WING 35.53	NEW ERA 42.24
PALM LEAF 42.24	BOOK FAIR 43.34	DROP GOAL 53.35
WING FLAP 53.35	LOVE SEAT 54.45	MUSIC PAPER 65.56
CROWN HEADS 73.37	MUMMY CLOTH 85.58	

By way of contrast, the two words in each of these phrases are of different lengths and the junction of the two numerical halves lies within one of the words:

BACK G'ARDEN 24.42BAGGAG'E AGENT 25.52NEW'S AD 42.24CONY B'URROW 59.95SERVI'CE HAT 73.37PRIZE W'INNERS 97.79

The words below have been selected from a list of 726, prepared with the mininum of computer assistance and the maximum of eyestrain! Together with 11.11, 22.22 ... to 99.99 (see above), they cover the 99 palindromic numbers from 0110 to 9999. The words ascribed to a particular number are of different lengths. A few numbers defied my attempts to find a word. In these cases, I have substituted a two-word coined phrase where possible. Ten numbers remain wordless: 0770, 0880, 0990, 2002, 3003, 4004, 5005, 7007, 8008 and 9009.

Unless specified otherwise, all words can be found in one or more of Webster's Second, Webster's Third, the Oxford English Dictionary, The Complete Word Game Dictionary (Tom Pulliam and Gorton Carruth, 1984), A Dictionary of Flowering Plants and Ferns (J.C. Willis, 1966), Nomenclator Zoologicus (Zoological Society of London), and Stedman's Medical Dictionary (25th edition).

0110 aj [Dictionary of Jamaican English (1967)] 0220 aaas ? 0330 bask 0440 acus 0550 baboot 0660 Abba four [a pop group] 244

1001 ja 1221 kail, hackia, bedabble 1331 laze, befold 1441 maut, heaven, deadlock 1551 hafnyl, jacamars, Decabelone 1661 cherry, diabolos [Gk] 1771 decently 1881 dabbed powder [coined phrase] 1991 bald Suzy [coined phrase] 2112 epic, braced 2332 horn, emetic, barbered sews. hoarse. bracelet 2442 2552 pizz ?, deploy, legalize, declaiming 2662 grayly, gamester, bandalette 2772 celebrator, academicisms 2882 bragozzo, haematosis 2992 carbethoxy 3113 opal, bonded, gem-faced 3223 wire, salami, radiance 3443 sory, matter, enclosed, bidentalia 3553 parrot, shaggily, abbeystede, deep-damasked 3663 poetry, conducts, bandoliers 3773 desirous, allegorize 3883 Christys, filibuster, backcrossing 3993 fasciaplasty, haberdasheress 4114 tuck, simiad 4224 single, five-leaf, beholdable 4334 twos, buttie ?, impeding, leaf-shaped 4554 fruity, colonize, ethicalism, reaffirmance 4664 tincture, affronting, faciolingual 4774 geotropy, actinology, affrightedly eucaryotes, acidophilous 4884 4994 heliotropy, bacteriopexy 5115 novcic, fullface, Cassiaceae 5225 sulpha, formicid 5335 muslin, Copenhagen 5445 stover, operates, elliptical, meclofenamic 5665 plug-ugly, equalizing, Judaeophobes 5775 panzooty, Artocarpus, alexandrites 5885 phenotypes, acrognostics, coffee-roasting 5995 dichotomists, achromatocytic ? 6006 toy cab [coined phrase] 6116 tutche, thoracic 6226 wurmal, Spiraeas, overbidded 6336 syssel, tetrapod, antisavage, gentle-handed pewterer, proclaimer, Gondwanaland 6446 6556 propenyl, patisserie, unoccidental 6776 overgently, circumlocute, mammogenically 6886 brushworks, noncausality 6996 bilipurpurin, antidepressant 7117 tusk ache [coined word] what the elephant got?

7227 sultanic, stillehede 7337 stumbler, unmetallic, Schisandraceae 7447 routines, equivocacy, pinnatilobed 7557 oustitis, mutilative, Lophiomyidae starringly, levocardiogram 7667 7887 mispursuit, counterstamp, chroaximetrics 7997 homomorphous, anthraquinones 8118 huzzahed, Hypericaceae 8228 smoothable. Amaryllidaceae 8338 systemas, nostomania, Tarsipedinae 8448 frustrated, conveyancing, molengraaffite 8558 nonswimmer, Monocystidae, hemorrhagenics 8668 zymography, butterscotch, compassionated synonymize, eventuations, allotriodontia 8778 8998 preposterous, circumvoluting 9119 fusty-faced [coined word] 9229 wispy hedge [coined phrase] 9339 prospicience, vasculocardiac 9449 transvesical, superangelical 9559 synovially, hysteroceles dysoxidizing, Microtrachelus 9669 9779 sixty-fours, Ostariophyseae 9889 sponsorships, trigonometries

A word can also be split into two equal-length groups of letters to form a six-digit, rather than a four-digit, palindrome. For example, UNINTERMITTENT (101,101) can be found in Webster's Second. These words, together with words split into a number of groups other than two, will be covered by Rex Gooch in the sequel.