

REVERSALS REVISITED

CHRISTOPHER McMANUS
Silver Spring, Maryland

Words embedded in unrelated words are a frequent source of word play. When the embedded word occurs in reverse order, the surprise factor is further increased. For example, a recent cryptic crossword included the punning clue "We sent up plant monster". The answer was WEREWOLF, i.e., WE followed by FLOWER reversed. Another answer in the same puzzle was DAIRYMAID. Its clue dissected the answer into AID preceded by the reversal of MYRIAD.

Reverse embeddings are also a basic tool for those who construct palindromic sentences. "Dennis and Edna sinned" uses a full word reversal (DENNIS-SINNED) and a partial reversal (EDNA-AND).

Dmitri Borgmann investigated several types of word reversals in his book *Language on Vacation* (1965). He focused on four kinds of word reversals: (a) full reversals, such as DESSERTS-STRESSED, (b) drop-letter reversals, such as DEGAUSS-aSSUAGED, (c) anchored reversals, such as TESSERACT-CARESSETh, which differ in a final letter, and (d) circular reversals, such as ROTATIVELY-LEVITATORY.

Borgmann's drop-letter reversals are one form of what I call embedded reversals. I will hereafter use that term to describe word pairs of unequal length, where the shorter word's reverse spelling is wholly contained in the longer word. Some examples are: ANEMONE-phENOMENA, SENICIDE-mEDICINES, NINTH-lightNING.

AXOLOTL, SEXUAL, GNOMES, DREIDL, LONELY, IGUANA, IGLOO, ARGOSY, LIBIDO, MARTINI, OEDIPAL, BANANA. What are these words? Wisps of a dream recalled on an analyst's couch? No, they are a dozen of the least expected embedded reversals. Note that only four of their host words are found in general dictionaries: cheeSEMONGer, soLDIERDom, schOOL-GIrl, corrODIBILity. The remaining eight are embedded in medico-technical terms: phenyLTOLoXamine, myeLAUXES, xYLENOL, titANAUGite, chrYS-OGRAph,. pirINITRAMide, LAPIDEous, ANANABasia.

Most embedded reversals involve a shorter word of three letters or fewer. Cases where the embedded word is six letters or longer are rare enough to be interesting. To prove this rarity to yourself, try mentally reversing the seven- to fifteen-letter words you encounter in your general reading; count the few embedded reversals of four letters or more. Conversely, you might randomly choose some words of length four, five and six, and try to find words that contain their reversals. For ex-

ample, MOST and LONG are found in many words, but their reversals occur only in the common words freTSOMe and maGNOLia.

The longest embedded reversals in my gleanings were three nine-letter words: LEVITATOR in ROTATIVELY, SOLLERETS in liSTERELLOSis, and SONOMOTOR in pROTOMONOSTelic. My sources were four authorities: the Official Scrabble Players Dictionary, Webster's 2nd, Stedman's Medical Dictionary, and the Shorter Oxford Dictionary. Eight-letter embeddings were nearly as rare; the 26 I encountered included:

ANIMATOR-pROTAMINase	MARGINAL-pLANIGRAM
ATROPINE-rENIPORTAL	REPORTER-RETROPERitonitis
CAVORTER-RETROVACcinate	SARGASSO-gLOSSAGRAS
LACINESS-eSSENICAL	SNORTING-iGNITRONS
LEVITATE-vegETATIVELY	TILLERED-larDERELLITe

I found just 209 seven-letter words that are reverse-embeddable; ten are featured in the quiz which concludes this article. Other amusing seven-letter reversals included:

BAILIFF-aFFILIABLE	ILLICIT-verTICILLIum
COLLATE-mETALLOChrome	MINARET-inTERANIMate
DEPORTS-siniSTROPEDal	PROMOTE-acETOMORPhine
DILEMMA-AMMELIDe	REFINES-arSENIFERous
DRAUGHT-healthGUARD	RENEGED-DEGENERate
EELLIKE-killeEKILLEE	RETSINA-cANISTER
FRETSAW-WASTERFul	SATRAPS-aSPARTASe
ILLEGAL-flAGELLIST	SLALOMS-oSMOLALS

Some 1,176 embedded reversals involved six-letter words. These were principally found in technical and medical terms, as the following sampler reflects:

ALEPOT-auTOPELAGic	MAIDEN-ethyleNEDIAMine
ASSENT-wITNESSABLE	MANIAC-proCAINAMide
CATNAP-PANTACosm	MOMMAS-pSAMMOMa
CAVORT-reTROVACcinate	MOVING-iGNIVOMous
DELUDE-schEduLED	OMELET-TELEMotor
DENIAL-expLAINED	METALS-sLATEMaker
DENIMS-jaSMINED	PILFER-foREFLIPper
EDITOR-pROTIDE	PORTLY-acetYLTROPeine
ENEMAS-SAMENESS	PROLIX-oXILORPhan
ENTRAP-PARTNER	SANITY-biocYTINASe
FOSSIL-LISSOFlagellate	SARONG-siGNORAS
IDIOTS-maSTOIDItis	SENILE-fELINES
KILLER-squirRELLIKE	STUNTS-cheSTNUTS
LESION-NOISELess	TOCSIN-meNISCOTome
LEWDER-pREDWELL	TOILET-aTELIOTic

Reverse embeddings are nearly always unrelated to the host word. Notable exceptions include: senSUOUSNESS, aCIDICAL, uNEVEN, aSSESS-

Able, rEDIVIDE. By contrast, longer words embedded in direct order in a host word are nearly always related to their host. A seven-letter unrelated direct implant, like ANOTHER in mechANOTHERapy, once merited mention in Word Ways. The present record for an unrelated direct embedding is the ten-letter word INTERLINES, found in paINTERLINESs.

Reverse charades are much rarer than direct word charades. Reverse charades are, of course, words that decompose into two or more reversals. A few favorite examples embody images:

partizan-Nazi trap	knifeman-name fink
paramenic-cinema rap	lioniser-resin oil
examined-denim axe	nevocytic-city coven
muskrats-stark sum	stenciler-relic nets
semidomed-demo dimes	stratums-smut arts
semimetal-late mimes	decimals-slam iced
datelines-senile tad	rifledom-model fir
racemases-sesame car	rebuttons-snot tuber
recalcified-deific lacer	maestros-sort seam

Triple reverse charades include:

cranioclasia-sisal coin arc	spongiocytics-city coign ops
gastroparetic-citer aprot sag	macromutates-seta tumor cam
resuscitator-rotat tics user	verticillates-setal licit rev

This study ends with a short quiz, to test your reversing skills. All answers are found in various general purpose dictionaries.

1. What is the shortest common word to embed each of the following four-letter words in reverse: AGES, BORE, CAGE, CRAG, DAMN, FEEL, HALO, IOTA, MALL, SITE, TAXI, URGE?
2. What is the shortest word to embed each of the following five-letter words in reverse: ANNOY, AUGUR, GOLLY, OBESE, PIECE, REBEL, SANER, SILLY, SORTS, TANGO, TORTE, WADER?
3. What is the shortest word in common use that embeds each of the following six-letter words in reverse: ALLUDE, AUTUMN, BATTER, CARESS, DETAIL, FERRET, FITTER, RATING, SENORA, STRAWY?
4. What is the shortest common word to embed each of the following six-letter words in reverse: BASSES, BITING, DETAIN, FARCES, ROSTRA, SACRED, SITTER, SOIREE, TARGET, VITALS?
5. What is the shortest word to embed each of the following seven-letter words in reverse: EFFACED, GNARRED, MERITER, RENEGED, SECRETS, SENECEO, SHALLOT, SIGNALS, VITAMIN, ZINGIER?