

COLLOQUY

Webster's Dictionary defines colloquy as mutual discourse. Readers are encouraged to submit additions, corrections and comments about earlier articles appearing in Word Ways. Comments received at least seven weeks prior to publication of an issue will appear in that issue.

Since August 1992 **Word Ways** has provided a forum for a discussion of the relative merits of constructing word squares from the bottom up versus the top down. The editor has reluctantly come to the conclusion that this topic is not particularly well-illuminated by claims and counterclaims that a computer program has taken n hours (or m operating instructions) to achieve a given result. The quality of the program is an important determinant of the outcome (no doubt programs exist which can "prove" either assertion), but this cannot be adequately evaluated without a more extensive discussion of programming minutiae than **Word Ways** is prepared to provide space for. The ultimate test of bottoms-up vs. top-down is a pragmatic one: which will contribute more materially to the construction of the first quality ten-square? Perhaps it will be some sort of hybrid procedure (see Leonard Gordon's comments, below).

Leonard Gordon writes "Based on pruning arguments alone, I am not convinced that it is better to work bottom up. But, if we use preselected base words, it is probably better to work from the bottom simply because it is easier to make the selection. However, I suspect that a study of vowel-consonant patterns will lead to intelligent choices for top words. If that is the case, I suggest that for 9x9 squares, first lay out the top three words. Then from the list of bottom words that match, accept only those that pass Long's criterion calculated for the 4th through 8th letters. This way we consider both top and bottom relationships in our pruning."

In "Ars Magna: The Ten-Square" in the November 1985 **Word Ways**, Jeff Grant used SOLSPRINGS (people named Sol Spring) in a ten-square. Murray Pearce suggests replacing this with SOU SPRINGS, a place in Nevada listed in the *Omni Gazetteer of the USA*, edited by Frank Abate and published in 1991. Apparently it is a variant spelling of another name for this geographic feature. Similarly, the editor has been able to locate both LES RUNNELS and LES GUNNELS whom Jeff Grant used in another ten-square: Leslie Runnels, Crystal Grove FL; Leslie A. Gunnels, Fairfax VA; Leslie P. Gunnels, Kingstree SC; Lessie M. Gunnels, Richardson TX. All were found with the aid of Phonedisc (see the May 1991 **Word Ways**).

Sir Jeremy Morse notes that SHOUGH (a lapdog, found in "Macbeth")

is a better example of the OG pronunciation than SKEOUGH. Chambers gives "shog" as the first pronunciation, ahead of "shock" and "shuff". It should certainly be in McManus's main list.

Peter Newby writes "Unaware of my Pears Word Games, Christopher McManus published 'Ana-Gram-Mar Chains' (Word Ways, November 1990) and whetted the appetite of Leonard Gordon who has since developed his own forms in a series of recent Word Ways articles. As Leonard seems at a loss for a generic term to describe what I originally called 'back to front wordplay', may I propose the name LOGOMOTION for the concept and that individual chains may be modified by the natural 'adjective' of LOGOMOTIVE? Though my original chains were of the back to front type inasmuch as they went from one extreme (such as FATHER) to another (such as SON), my latest chains, which were an additional aspect of complex cryptic crosswords, were of the back to back type inasmuch as they are completely cyclic. By being completely cyclic the puzzle solver could return to his original word in either direction."

Errata: The Colloquy sentence in the middle of page 82 of the May issue should read: Using hundreds of **Gordon's** computer runs, **the editor** has ascertained... Lee Sallows notes, in the opening hexadecimal example of "Base 27: The Key to a New Gematria", that F in AB9F stands for 15, not 16, so that this translates to 43975 in base 10, not 43936. On page 70, DUET + GORE = BULL should read DUET + BULL = GORE. On page 73, delete SATAN mod HATE \equiv BOOK, replacing it with LEEWAY mod HATE \equiv ANEW.

In August 1991 Robert Cass Keller lamented that NORMAN SCHWARZKOPF wasn't named MELVIN, providing a 17-letter isogram name. Andrew Griscom recently noted the name RON YEDLOUTSCHNIG in the Nov 26 1992 New York Times (page A9). Too bad his first name isn't MARK, for he would then have an equally-long isogram name.

Dan Tilque found AEEA to add to "Another Palindromic Insertion" in the August 1992 issue. Also called Isla de Calipso, this is an islet of antiquity, situated in the Gulf Of Squillace, but now under water. His source is the 70-volume Spanish work Enciclopedia Universal Illustrada, published in Madrid between 1905 and 1930.

In a May 1993 column in the New York Times magazine, William Safire proposes BANANA as a prime example of an amusing word, a pleasant antidote to the diet of ugly words discussed in recent Word Ways. Remember when Alfred Kahn in the Carter administration was told never to use the word "recession", and substituted "banana" for it ("the worst banana you ever saw")? Or have you heard of the Smart Banana Project, a program of the Rainforest Alliance to work with banana producers to eliminate environmental tragedies? Safire concludes "there is no way of dealing seriously with the Banana Question". Any reader ideas for other funny words?

Brian Head writes that Michael Flanders's lyric to "Have Some Madeira, M'Dear" contains the wonderful zeugma "She made no reply, up her mind, and a dash for the door."

In "676 Bigrams" in November 1982, the editor lamented that the bigram FX was contained in no better word than Poe's coined example FXR in his short story "X-ing a Paragrab". Recently, the editor discovered two individuals having the surname AFXENTIOU: Andy of West Orange NJ, and Chrystala of Staten Island NY, courtesy of the Phonedisc CD-ROM described in the May 1991 **Word Ways**.

Leonard Gordon, revisiting the subject of letter-shift words (such as CHEER to JOLLY) described in the February 1990 issue, confirms that WILIWILI to COROCORO (see the February 1979 issue) is the only known eight-letter example. He adds the seven-letter BUMPILY-UNFIBER to the previously-known NOWHERE-ABJURER, SULPHUR-PRIMERO and CHECHEN-PURPURA. The following six-letter letter-shift words are new; all are found in Webster's Second or Third, except for asterisked ones which can be found in the OED.

becuna-orphan	jigjig-pompon	annona-reefer	panfil-whumps
greane*-ternar	mulmul-Sarsar	cheery-purrel	greeny-terral
cocoo*-seesee	prieve-yarnen	cheere*-purrer	banian-fermer
greene*-terrar	alohas-grungy	munchy-satiné	lateen-shallu
huseau*-recoke	alexir*-whaten	enarch-verity	

Eddie Syratt, a friend of Ted Clarke, commented on Knuth's article "Who is to decide what's 'real' [acceptable five-letter words] and what is not? I have an acquaintance who does the Times crossword regularly over breakfast, and without using a dictionary; if he can't, he complains that a word is only a 'real' word if he knows it...His doctrine is embedded in a quote [Balliol, early nineteenth century] 'I am Master of this College / And what I don't know isn't knowledge'."

Ted Clarke wrote "I found the article by Lee Sallows very interesting - probably because it is very much in the vein of my own preferences for combining numerical with lexical puzzles...I feel [it to be] a brilliant article." Michael Helsem echoes "Brilliant article by Sallows. If only it weren't so arduous to calculate ...regular Gematria is better because it makes interesting equivalences (mystery = zugzwang)." Lee Sallows supplied the editor with a short computer program to aid in Base 27 calculations; send the editor a blank floppy and a dollar to cover processing and mailing costs, and he'll send the program back (to be read on IBM-compatible PCs). The program is oriented toward calculating sums, but Lee says "by changing line 300 in SVSMS to S = Z(I)*Z(J) you can look for products rather than sums (and similarly for any function)."

In "The Burletta of the Quest Nears", Ted Clarke quoted E. Blacker, an anagram of E. B. Clarke. To the editor's amazement, E. Ryan Blacker of Cheltenham, in Gloucester, wrote on March 30 to comment on the "Bottoms Up!" article in the February issue (he had found **Word Ways** at his dentist's):

I find the statement that 'English is relatively "ending poor"..' to be quite interesting...I take it that Messrs. Albert and Gor-

don appreciate that the validity of their statements will be significantly influenced by the squares' order of magnitude...Mr Albert's statement that 'there are many more combinations of letters that begin words than that end words' is rather ambiguous. Does he mean combinations or permutations? In other words, does he differentiate between, for example, trigrams and tri-graphs?...Mr Gordon specifies 'trigram pruning', but his examples are of mixed groups of three letters from spurious words. It would have been far better, and much clearer, if both contributors had given examples using valid words and letter 'combinations'.

The combination of the three letters TEA can be rearranged into the permutations TAE ETA EAT ATE AET. Does Mr Albert consider only one combination, say TEA, or all of those of its permutations which occur in his wordlist entries? My research shows that in a list of 100,000 ten-letter words there could well be as many as 352 thousand to 382 thousand different groups, of 2 to 9 letter sets, at the beginning and end of the words.

I am assuming that what matters most, in considering the 'ending poor' statement regarding English word squares, is the relative numbers of different groups of beginning and ending sets of letters, rather than the number of such sets in the group. The two numbers are complementary, their product equalling the total number of words. Therefore, the smaller the number of groups, the larger will be the average number of similar sets of letters per group. Although a relative newcomer to the ten-square problem, it seems to me that the speed advantage in word square building must lie with the approach which uses the smaller number of different groups of letter sets. Because of the ambiguity of Mr Albert's statement, I am not sure whether his point of view is in accord with my conclusion.

It may help your readers to draw their own conclusions by referring to the following tabulation for ten-letter words:

Letters in Group		2	3	4	5	6	7	8	9
Average Number	Leading	344	41	11	4.8	3.1	2.4	2.1	1.9
of Sets Per Group	Trailing	346	56	16	6.8	3.8	2.5	2.1	1.9

Leonard Gordon has gathered terminal statistics for nine-letter words. In 47,400 lower-case words, there are 282 different beginning and 295 different ending bigrams, and 2496 beginning and 1676 ending trigrams. Eliminating the ones that occur only once or twice, the bigrams reduce to 243 and 185, and the trigrams to 2050 and 1193 - definitely ending-poor in both categories. He notes "we eliminate 1000 words, speeding up pruning considerably."

Jeff Grant found another word with consecutive doubled vowels, joining the three he reported in the August 1992 issue: TEEOO, a variant of *teeack*, an Orkney Island term for the lapwing given in the Second Edition of the OED.