

# THE BURLETTA OF THE QUEST NEARS

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My copy of Webster's Third, in one of its definitions, yields the following possibility for **rebuttal**: the act of exposing the falsity of, or opposition by countervailing proof to, some contention or argument.

However, I cannot conceive how a rebuttal can be made of a true statement such as: I am unable to convince myself that there is any advantage in standing on my head. If, however, I were to proclaim that I had convinced myself, of an advantage or otherwise, and were to present some argument for my conviction, then such proclamation might well be a subject for rebuttal. In the case of the R. Suppud's approach to the search for a ten-square, however, I was quite pleased to read two remarkably spurious rebuttals directed at claims I never made ("Bottoms Up!" in the February 1993 **Word Ways**), if only because I have never been given so much coverage in a prestigious publication. As is acknowledged in public life generally, no publicity is bad publicity. Though I must beware; overexposure can be equally damaging. I've known cases in which persons have been forced to identify half of their journalistic efforts **by newer pet names**.

Concerning the view held '... by ... over a century of expert human formists, ... there is an enormous advantage to building large forms [of word squares] from the bottom up, instead of from the top word down', I had written "I have pondered over this approach [bottom word up] very deeply but have been unable to convince myself that there is any advantage in ... working ... backwards".

The target of the so-called rebuttals is the "startling claim" coined, yet attributed to me, by the Editor, in order to add "a bit of spice to **Word Ways**' pages"; he invited me to respond to the comments he'd received from Messrs. Albert and Gordon after he'd published them. To use one of the Editor's favorite **-gry** words, which he may add to his list, I was not over-angry at the comments and had no desire to respond in a similar confrontational vein. However, since there may be something of interest to other **Word Ways** readers who are, as I am, keen to extend their logological understanding, I will try to give my answers to these comments in a positive manner. After all, as **E. Blacker** expressed it, 'No sightless man is quite so blind as he who has no open mind.'

Starting first of all with Eric Albert's comments, I find that,

ignoring his professed judgement of my competence as a programmer, they contain nothing to add to the views he expressed during our pen-friendship. His last letter to me was dated 3-1-91; I received no answers to my letters to him dated 11-1-92 and 26-3-92. (My American readers are asked to bear with my English eccentric manner of expressing dates; the final one gives the clue to their interpretation. I just cannot understand why you use an incorrect ordering, unless it stemmed from the German counting system.)

Eric's assertions are just that - assertions. I would have liked to have seen some proofs instead. Because he is well out-of-date with my progress, Eric has also completely misjudged the position that I have now attained. I am now convinced that my approach is to be preferred and have what I consider to be adequate proof to support this contention. It is based on a study of my set of 54,000 ten-letter words. I know that lists of around twice this size exist stateside but, since these undoubtedly include a large number of unacceptable words (and phrases), I stand by my conviction.

My study involved all '... combinations of letters that begin word than that end words ...' to use Eric's phrase (which I have never been quite sure how to interpret). All means, in my case, the starting combinations covering 2 to 9 letters - the words themselves forming the 10-letter group - for the words both in the forward and reverse-reading directions. Maybe an example will clear any confusion. Take the following BLACK\*\*\*\*\* words:

BLACKBERRY	YRREBKCALB	IVORYBLACK	KCALBYROVI
BLACKBOARD	DRAOBKCALB	PENNYBLACK	KCALBYNNEP
BLACKGUARD	DRAUGKCALB	PITCHBLACK	KCALBHCTIP
BLACKHEART	TRAEHKCALB	SMOKEBLACK	KCALBEKOMS
BLACKSMITH	HTIMSKCALB		

My study, represented by the 5 left-hand sets above, took the leading letters, for each number from 2 to 9 in the group, as a combination to be counted: e.g., BLACK was a 5-letter combination, as was YRREB, DRAOB, etc.

However, referring to the 4 right-hand sets, I was unable to decide whether Eric's phrase referred only to the words in normal order, i.e., while IVORY PENNY PITCH and SMOKE were taken naturally as beginning combinations, whether BLACK was taken as an end combination. If so, then he and I are counting different groups. Would he ever count a beginning combination of KCALB?

The obvious main difference between the above two sets is the out-of-alphabetical order that ensues when the normal order words are simply reversed without re-listing them. My approach accepts that the computer is not at all concerned whether its inputs are valid words or not. But it does help the programming search routines to follow a consistent order within the inputted data. Therefore, if I decided to adopt the bottoms-up approach it would be with a reversed set of 10-letter words arranged in alphabetical

order - of what were originally their final letters. My analysis has assumed, if Eric's assertion that English is "ending poor" relates to a comparison between beginning and ending groups of letters in normal letter-order words, that my comparison should be between the two sets of beginning groups in the normal and reversed-order words. I did this comparison for 206,557 and 190,153 groups of 2 to 9-letters, respectively. The average, 198,365, speaks for itself, the deviations from average being a mere 4%. This is hardly Eric's 'many more'.

If Eric is reluctant to resume writing to me, perhaps he would clarify his "ending poor" assertion to **Word Ways**, or at least provide a reference to substantiate it. This would then give others, including me, the opportunity to properly assess the relative merits of the two approaches in ten-square creation.

I could continue by reporting on a number of experiments I have conducted, using my 'unsophisticated and inefficient' program, to run comparative tests of the downhill and uphill approaches. I will, however, give just one example, based on the **MISSATICAL** square of Jeff Grant's article in the November 1990 **Word Ways**. I used this to check out a provisional stage of my program on 11-6-92 (June) when my list contained only 39,388 words. A complete downhill run was achieved after a count of 34,620 sequences. After I had increased my wordlist to 53,978 words, a further downhill run was completed for a count of 55,014. A test was then made on the following day (29-12-92) for the uphill task, which it certainly proved to be; I abandoned the test because it had found only the second-from-bottom row word, **ANGLETERRE**, after a count of 193,800. The counts in both run directions related to sequences subsequent to the input of the starting words, **MISSATICAL** (normal, downhill) and **SESSENSSEL** (reversed, uphill).

Eric's most surprising comment is "I would not argue with the claim that it is possible to write some program that constructs word squares quicker from the top down, ...". Q.E.D.

Apart from wondering why Leonard Gordon felt that his contribution might support that of Eric Albert, since Leonard's comments included the sentence "There may be a slight advantage in working in the normal direction", I feel his suggestion that I 'back off from 10-by-10 word squares' shows their concern that I might beat them to the punch. If he and Eric carry on along their chosen path, I sincerely hope they can stay the course.

Finally, I informed Eric by letter (11-1-92) that my involvement in the search for a good ten-square was primarily for its challenge in programming techniques and that the prospect of running my computer all night long, as he does, for months on end did not appeal to me in the slightest. I now only run my program when I have a computer standing idle. But in view of the as-yet-undisputed three-quarters of a quadrillion years (British count) that I estimated might be required to prove there are no words to form the elusive tenner, I would naturally be delighted if I were to strike lucky; but I pin more hope on ten thousand monkeys I have recently set tapping away at typewriters...