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## ANOTHER PALINDROMIC INSERTION

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In the November 1982 issue of **Word Ways**, I exhibited a palindromic alphabetic insertion based on AA, a type of rough, scoriaceous lava. A complete list of 26 words was found, starting with AAA. ABA. ACA ... through to AZA.

An extension of this concept is the alphabetic double insertion, where a doubled letter is placed between two vowels. If these vowels are the same then one has a palindromic alphabetic double insertion. Letting X stand for the vowel, the 26 words sought are of the form XAAX, XBBX ... XZZX.

Once again using AA, here is my best effort. All terms have been taken from the <u>Palindromicon</u> (see **Word Ways**, Feb 1990). I would be most grateful if anyone can fill in a gap or two.

- AAAA a Tahitian interjection of laughter or ridicule
- ABBA a title given in the Syriac and Coptic churches to bishops (OED)
- ACCA a gold and silk brocade of medieval origin (Web 3)
- ADDA the common Egyptian skink (Web 3)
- AEEA
- AFFA dialectic form of 'from off' (Web 2)
- AGGA a Mesopotamian ruler, son of Mebaragesi of Kish (Encyclopedia Judaica)
- AHHA the surname of Fatima Ahha, listed in the Mar 1990 Paris telephone directory
- AIIA the first name of Aiia Malama, a Polynesian listed on the 1984 and 1985 Electoral Roll for Auckland Central New Zealand
- AJJA a small, isolated town in north Jordan (Times Atlas of the World)
- AKKA a race of pygmies inhabiting the Vele basin in the Belgian Congo, now Zaire (Web 3)
- ALLA by or according to, after the manner of (Web 2)
- AMMA a surgical band or truss (OED)
- ANNA an Indian denomination of money, the sixteenth part of a rupee (OED)
- AOOA
- APPA a Bantoid language spoken by about 600,000 people in Nigeria (Classification and Index of the World's Languages)
- AQQA
- ARRA variant of 'arrah', an expletive expressing emotion or excitement, common in Anglo-Irish speech (OED)
- ASSA an 11-12th century spelling of 'ass' (OED)

- AUUA a Rarotongan term for the wall plate of a house
- AVVA homeland of the Avvin, a people who dwelt in 'villages near 'ass' (Encyclopedia Judaica)
- AWWA the surname of Arfan Awwa, listed in the Apr 1976 Dallas telephone directory
- AXXA an entry in the 1990 Paris telephone directory
- AYYA a cape on the southern Black Sea coast of Crimea in Russia (Columbia-Lippincott Gazetteer)
- AZZA a wadi listed in the Official Standard Names Gazetteer of lran

## ON WORDSQUARE CONSTRUCTION BY COMPUTER

In Volume 1 Issue 2 (May 1992) of his magazine Wordsworth, Ted Clarke of Newquay, Cornwall, England describes his efforts to find a 10-square with his personal computer. He disagrees with the bottoms-up construction method used by a century of National Puzzlers' League formists, arguing that it leads to a slower pruning of unprofitable branches:

There is another, completely opposite, general approach to the basic programming algorithm, which has been adopted to my knowledge by Eric Albert ... the opposite approach starting with the bottom word and progressing up the grid to the top, or first line, word. Eric states that this is the formist's basic rule ... which he asserts makes eminent sense because there are far more letter combinations that begin words than that end words. I have pondered over this approach very deeply but have been unable to convince myself that there is any advantage in compounding the programming task by working backwards with reversed words ... Before I settled for the natural top-down approach, I tried the Borgmann square [the near-tautonymic 10-square starting with ORANGUTANG in Language on Vacation] in both directions ... the result on the test square indicated that the bottom-top approach took 264 seconds to complete its run, compared with the 122 seconds of the top-down run. It seemed to me, apart from the extra work involved in reversing the word lists ... that the only real difference between the two approaches, so far as the computer was concerned, would be due to the rearrangement of the words in the database when the words were reversed. (My reasoning is based on the assumption that in both arrangements the words are listed alphabetically in sequentially-read files.) As I ran through various trials ... I took note of the differing letter combinations which were created at the beginnings of valid words; I failed to detect any obvious generally greater frequency of starting combinations - although I cannot call these observations anything like conclusive. On the whole, therefore, I saw no reason to change from my choice of the top-down approach ... [it] provided a much easier and more natural working format.