This article reports progress on what I call the '1352 Problem': finding words that begin or end with each of the 676 possible two-letter combinations. Earlier results are given in Dmitri Borgmann's 'Zero Redundancy!' in his book Beyond Language (Problem 137), Darryl Francis's 'Zero Redundancy Rides Again' in the August 1970 Word Ways, and my 'Initial Bigrams' and 'Final Bigrams' in the May and August 1975 Word Ways.

In one respect my standards have loosened since 1975. I no longer feel that nouns like 'BCG vaccine', 'DDT' or 'VD' should be considered inferior. As long as NI maintains distinctions among 'abbreviation', 'noun or abbreviation' and 'noun' for such items, this will not trivialize the problem. Such words seem to fit the criteria for English nouns better than exotic alternatives like 'Ddmashen' (Lebanese town) or 'udder' (long-obscure form of 'udder').

Otherwise, my standards are tighter. For example, capital L and Q in Amerind names transcribe different sounds from lower case l and q, and are usually printed half the size of ordinary capitals. I therefore feel that they are non-English letters (like ê, ê, ë, etc.) and have sought new words for the bigrams LC-, LG-, LK-, QT-, -MQ, -NQ, -PQ.

Names found only in telephone directories are no longer accepted as entries. Telephone calls placed in the summer of 1978 to the odd surnames listed at the end of my article 'What's The Good Word?' in the November 1976 Word Ways revealed only three genuine names: Jeanette Fmura of Cleveland (her daughter thought the name of Russian origin), Arun Pvongnak of Houston (of Thai extraction), and Alex Jvirblis of San Diego (a Lithuanian name). Consequently, the bigrams BP-, CB-, FS-, FV-, HG-, LB-, PP-, WF-, XJ-, -JH, -MG, -NL, -OJ should be replaced.

Words using the bigrams PV-, ZZ-, -NW and (almost certainly) -CB proved to be spurious, and the references citing BT-, BV-, FG-, GG-, GV-, RR-, TX-, WJ-, WV-, WW-, XJ-, and -CX are undesirably vague or hard to find. Words with the bigrams CK-, NP-, QL-, QS-, RX-, XG-, XV-, -MW and -QD were printed in italic type in the original reference, and are presumed to be non-English. Other words with non-English letters (diacritics) in the bigrams were disallowed, necessitating replacements for CG-, LR- and -BC.
In many cases, I have found better examples for already-acceptable words: BX-, DL-, JR-, PM-, RP-, WP-, -BM, -DM, -HG, -HW, -TD, -TP, -TQ and -XK are given below. In addition, many non-NI words were upgraded to NI2:

Initial bigrams: Bjarmaland, bs, Ccoya, ds, Ezra, fs, Horrithi, hm, Hirfazi, Hvergelmir, js, Mjollnir, mkono, Nzambi, qs, qvint, ssu, Tvashtar, ueba, Uuchathon, xa, wite, ws, yferre, Yggdrasill, yhte, ymage, Yquem, yre, ys, Yvonne, Zmudz.

Final bigrams: nisf keddah, xs.

Abbreviations in the list that follows are explained in the bibliography at the end.

**INITIAL BIGRAMS**

<table>
<thead>
<tr>
<th>Initial Bigram</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>BT</td>
<td>Btikhnay = populated place (OSN Morocco)</td>
</tr>
<tr>
<td>BV</td>
<td>Bvekenya = pseudonym of Cecil Bernard (NUC)</td>
</tr>
<tr>
<td>BX</td>
<td>BX = base exchange, a noun (6000)</td>
</tr>
<tr>
<td>CB</td>
<td>Ras el Chasc = point (OSN Libya)</td>
</tr>
<tr>
<td>CK</td>
<td>Ckotol = place in Caroline Islands (TIG)</td>
</tr>
<tr>
<td>DL</td>
<td>M. B. Dlamini = Swaziland diplomat (Who’s Who in America, 1972-73)</td>
</tr>
<tr>
<td>FG</td>
<td>Figura = populated place (OSN Malta)</td>
</tr>
<tr>
<td>FM</td>
<td>FMN = a riboflavin, flavin mononucleotide (6000)</td>
</tr>
<tr>
<td>FS</td>
<td>fs (NI2, NI3); Fsiqin = populated place (OSN Lebanon)</td>
</tr>
<tr>
<td>GG</td>
<td>Gg = pseudonym of translator 'Nicolas-on' (BMGC)</td>
</tr>
<tr>
<td>GV</td>
<td>Gvozdets = populated place in USSR (TIG)</td>
</tr>
<tr>
<td>JR</td>
<td>Jryaghedi = plant genus (A Dictionary of Flowering Plants and Ferns, J. C. Willis, 7th edition)</td>
</tr>
<tr>
<td>LB</td>
<td>Lby = populated place (OSN USSR)</td>
</tr>
<tr>
<td>LC</td>
<td>Lchap = populated place (OSN USSR)</td>
</tr>
<tr>
<td>LG</td>
<td>Lgalaiguhl-lanas = Haida family (HAL); Lgar = Asar = populated place (OSN USSR)</td>
</tr>
<tr>
<td>LK</td>
<td>Lkhoma = populated place (OSN Morocco)</td>
</tr>
<tr>
<td>LR</td>
<td>Lrhabt = mountain (OSN Syria)</td>
</tr>
<tr>
<td>NP</td>
<td>Npapuk = British Columbia Squamish village (HAL); Npigi = Mplji = stream (OSN Tanzania)</td>
</tr>
<tr>
<td>PM</td>
<td>Pmas Herbicides and Fungicides = brand name (TR 1971)</td>
</tr>
<tr>
<td>PP</td>
<td>Ppaelchae = Such‘l = populated place (OSN South Korea); PPLO = pleuro pneumonia-like organism (6000)</td>
</tr>
<tr>
<td>PV</td>
<td>Pvi.shk = Pey Beshk = populated place (OSN Iran)</td>
</tr>
<tr>
<td>QL</td>
<td>Qfabaa = populated place (OSN Syria)</td>
</tr>
<tr>
<td>QN</td>
<td>Quat = populated place (OSN Lebanon)</td>
</tr>
<tr>
<td>QS</td>
<td>qs (NI2, NI3); QSO = quasi-stellar object (6000)</td>
</tr>
<tr>
<td>QT</td>
<td>Qrah = place in Jordan (TIG); Qticare = cuticle remover (TND)</td>
</tr>
<tr>
<td>RP</td>
<td>Rpar Kremis = hills (OSN Mauretania); RPG = report program generator (6000)</td>
</tr>
<tr>
<td>RR</td>
<td>Rrasuf = populated place (TIG, OSN Albania)</td>
</tr>
<tr>
<td>RX</td>
<td>Rx (NI3); Rxawm Point = point (OSN Malta)</td>
</tr>
<tr>
<td>TX</td>
<td>Txiongo = populated place (TIG, OSN Angola)</td>
</tr>
</tbody>
</table>
UO uo = foe (OED); Uolba = populated place (OSN USSR)
WF WF = withdrawn, failing = type of grade (6000); Wf'Tn Proof = game (TND)
WJ Wjatka = Kirov (OSN USSR)
WP Wpyco = company (TR 1971); WP = withdrawn, passed = type of grade (6000)
WV Wv-ro-hae = title of collection of Ioway Indian hymns (NUC)
XD Xduct Jr. = tubing trademark (TR 1971)
XJ Ju. Xjurkjanen = linguist (1972 MLA International Bibliography); M. M. Xjamjaljajnen = linguist (1967 MLA International Bibliography)
XL Mel Xlander = author (NUC 1956-67); Xluch = populated place (OSN Mexico)
XW Xwieni Bay = cove (OSN Malta); Xwld = 'should' (OED)
XZ Xzit Chemical Co. (TR 1971)
XX Yxviken = populated place in Sweden (TIG)
ZP František Zpěvák = Czech author (BMGC)
ZZ Zelle = girl's name (The American Language, Supplement 1, H. L. Mencken, Knopf, 1945); zzzz = 'to snore' (The American Thesaurus of Slang, L. Berry and M. Van Den Bark, 2nd edition, Crowell, 1953)

FINAL BIGRAMS

BC ABC (NI3)
BG Küh-e Kabg = hill (OSN Iran)
BM ABM = anti-ballistic-missile (6000)
BW Ebbw Vale = vale in Wales (TIG); Ebbw = Welsh river (NI2, 1959 Gazetteer); Al Jabw = populated place (OSN Arabian Peninsula)
BX BX = base exchange, a noun (6000)
CB PCB = polychlorinated biphenyl (6000)
CP PCP = phenylcyclidine pill (6000)
CX L. Rycx = business writer (NUC)
DC Ban f! Kuadc = Papago nickname ('coyote peeked in') (DPU); AC/DC = bisexual (6000)
DF Hjadf = populated place (OSN Oman)
DK Kohadk = Papago group and village (DPU)
DM Zidm = ruin (OSN Bahrain, Kuwait, Qatar, and United Arab Emirates)
DP NADP = nicotinamide-adenine dinucleotide phosphate (6000)
FH Sofh = Egyptian goddess of writing (AD)
FZ Fritz Trefz = author (BMGC)
GC mygc = midge (OED)
HG centihg = pressure that supports a 1-cm column of mercury (Units of Measure, S. Dresner, Hastings House, 1971)
HW bohw = bough (OED)
JH Wejh = populated place in Saudi Arabia (TIG)
JM Sejm = Polish assembly (Funk & Wagnalls New Standard Dictionary, 1959); Khabarî al Hajm = marshes in Arabia (TIG)
In the following list of still-needed bigrams, double capitals mean that nothing has been found, a single capital means that something was found but it is terrible, and lower case means that the word is OK but an improvement would be welcome.

**Initial bigrams:**
- BP
- CG
- FP
- FV
- HG
- JQ
- JX
- Pq
- Qs
- Qj
- Qk
- qp
- VQ
- Wq
- Xp
- Xi
- Xg

18 needed, 11 badly)

**Final bigrams:**
- Bj
- BP
- Bv
- CF
- cm
- CR
- Cv
- Fb
- Fg
- Fj
- Fm
- Fp
- Fv
- Gp
- Ge
- JQ
- JV
- JW
- JX
- Kj
- Kq
- KV
- Kw
- MG
- MW
- PB
- Pj
- PQ
- PV
- Pz
- QG
- Qk
- Qp
- QV
- SJ
- Sv
- vb
- VO
- VW
- VZ
- XB
- Xc
- Xi
- XG
- Xj
- XM
- XP
- Xq
- XR
- Xz
- Zb
- ZC
- Zp
- Zv

(55 needed, 27 badly)

**BIBLIOGRAPHY**

- 6000 6000 Words: A Supplement to Webster's Third New International Dictionary (Springfield: G. & C. Merriam, 1976)
- AD An Archaic Dictionary, W. R. Cooper, 1876; reprinted by Gale Research Company, 1969
DPU A Dictionary of Papago Usage, Madeline Mathiot (Bloomington: Indiana University Press)


NUC National Union Catalog (of the Library of Congress) Pre-1956 Imprints (Mansell, 1968-75+) and same, 1956-67 (Rowman and Littlefield, 1970-72)

OED Oxford English Dictionary

OSN Official Standard Names Gazetteer (for various countries), U.S. Board on Geographical Names (U.S. Government Printing Office)

TIG Times Index-Gazetteer


TR Thomas Register of American Manufacturers and Thomas Register Catalog File (Thomas Publishing Company, annual)

THE OFFICIAL SCRABBLE PLAYERS DICTIONARY

Published by the G. & C. Merriam Company, this 662-page book is sponsored by Selchow & Righter, the company that manufactures the well-known board game of the same name. It lists more than 100,000 words of two through eight letters, drawn from several (unnamed) current desk dictionaries, plus inflected forms such as plurals, past tenses, gerunds, comparatives and superlatives. (The jacket blurb says that "many cannot be found in any other dictionary, not even unabridged editions", a claim I find hard to believe.) The book sells for $8.95, but I bought a copy for only $6.36 in Barnes & Noble.

Readers of Kister's Dictionary Buying Guide (see the May 1978 Word Ways) should be warned that this is not Tom Pulliam and Gorton Carruth's The Complete Scrabble Dictionary "new in 1977... so trendy that it even includes vulgarisms among its 220,000 total word stock... reliable, up-to-date, and can be recommended without hesitation". This book has not yet been published, but Word Ways will let its readership know of future developments.