## CONSONANTS IN ORDER

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AEIOU in Order (WW98037), UOIEA Words (WW2001313) and On Location With AEIOU (WW2002314) examined words in which the five major vowels each occur just once in alphabetical order, and reverse alphabetical order. This raises the question of words in which the consonants occur in alphabetical order or, indeed, in reverse alphabetical order.
In Language On Vacation, page 167, Dmitri Borgmann briefly mentions these words under the heading Consonantal Patterns. In each of his seven examples, which include BaCCaLauReaTe and TeTRaPLoiDiC, at least one consonant is represented more than once. He makes no mention of such words in which all the consonants are different. So let us start by dividing the words in which the consonants occur in alphabetical order/reverse alphabetical order into three categories: those in which all the consonants are different, those in which at least one consonant is repeated, and those in which all the consonants are repeated. Within the first two categories, I searched for those words having a high consonant to vowel ratio for a particular length of word. The fractions show the consonant/vowel ratios. Selected examples with at least three different consonants are given below. Eight was the most consonants found in a single word (as distinct from a phrase). The letter Y is treated here as a consonant.
Unreferenced examples are OED, Second Edition, head words, variant forms or text words including citations. Non-OED references: bar $=$ Bartholomew Gazetteer of Britain
cham $=$ Chambers English Dictionary csd = Chambers Scots Dictionary, 1975
Hodge $=$ Handbook of American Indians, edited by F.W. Hodge 1907 nwd $=$ The New Welsh Dictionary by Evans and Thomas, Christopher Davies $1970 \quad \mathbf{n z}=$ Nomenclator Zoologicus sted = Stedmans's MD w2 = Webster's Second Edition
Locations are taken from The United States Board on Geographic Names (BGN). They are populated places unless stated otherwise.

## WORDS IN WHICH ALL THE CONSONANTS ARE DIFFERENT

## Consonants in Alphabetical Order Consonants in Reverse Alphabetical Order 4 letters

4/0 XWLD, ZYTH, ZYXT
4/0 CHMN (cham), DRWY (nwd) 5 letters
5/0 MRTVY Luh (a marsh in Czechoslovakia) 4/1 SPeND, TRiNG, WoRLD, WRoNG, ZYMiC 6 letters
5/1 BLiMPS, CHiNTZ, CHRiST $5 / 1$ YSPeND, YToRND
7 letters
6/1 CHRiSTY, CLuMPST $5 / 2$ MiLK-FeD, SPaNKeD, TRiPLeD, WaRPiNG 8 letters
6/2 BaCKMoST,CHePSToW(bar), eCLaMPSY 6/2 TRaNKHoF (Germany), $5 / 3$ uNMiLKeD
9 letters
7/2 CHaMPaRTY, CHLiSTaWY (Poland) $6 / 3$ eXTiRPiNG, WiT-SPoNGe
10 letters
7/3 CHaMPeRTYe, CHeMoNaSTY (cham) 6/4 oVeR-PoLKeD, TRePoNeMaL, TRoPoLoGiC

| 7/4 | CHiLoMaSTiX (w2), CoLuMNaRiTY 12 letters $6 / 5$ | auXoTRoPHiC |
| :---: | :---: | :---: |
| 8/4 | FLaMeN-PRieST 7/5 | ViTSeRoeLHoF (farm in Belgium) |
| 6/7 | aCiDaMiNuRiaS (sted) 13 letters ${ }_{\text {7/6 }}$ | WaiTeR uPoN GoD (OED phrase) |
| WORDS IN WHICH AT LEAST ONE CONSONANT IS REPEATED |  |  |
| Consonants in Alphabetical Order Con |  | sonants in Reverse Alphabetical Order |
| 4/0 | PSST 4/0 | VMFF, VSSH, YSSH, YYNG |
| 4/1 | BRiTT, CHeSS, MuMPS, PuRRS $\quad 5$ letters | SNuFF, SPeLL, THeDD, TRuGG |
| 5/1 | CHiLLS, DJiNNS, KNaPPS 6 letters | SPLiFF, VRNaLL, WeRRLD, YSSeND, YTTRiC |
| $5 / 2$ | CaCKLeR, DeNSeSt, oDDMeNT 7 letters | PLuGGeD, VeTTiNG, ZYXoMMa (nz) |
|  | CaCKLer, DeNSeSt, oDDMeNT 8 letters | PLuGGeD, VeTTiNG, ZYXoMMa (nz) |
| 6/2 | BaCKLeSS, , CLiPPeRS, GLuMMeST(w2) $6 / 2$ 9 letters | SPiNNiNG,SPLeKKeD,TRiPPiNG,WRaPPiNG |
| 7/2 | BoB-CHeRRY, CHiLLNeSS 6/3 | SuSPeNDeD, TRaMMeLeD, YaTTeRiNG |
| 7/3 | 10 letters <br> BaFFLeMeNT, CuDGeLLeRS, CoMMoNNeSS 7/3 11 letters | TRaMMeLLeD, TRePaNNiNG, WeLL-LeGGeD |
| 8/3 | BaiLLiLLiLLY(csd),CLaPPeRSTaY 7/4 <br> 12 letters | ouTSPaNNiNG, oVeRRuNNiNG, WaTeRLoGGeD |
| 8/4 | CHiLLiNeSSeS (w2), GaLLiNiPPeRS 8/4 | TaTTeR-FuDDeD |
| 8/5 | BiCeLLuLaRiTY(?), NoNPoSSeSSiVe 13 letters | TRiNuNioNHooD |
|  | 14 letters |  |
| 8/6 | FeMiNiNeNeSSeS (w2) 7/7 | auToTeTRaPLoiD |
|  | 15 letters |  |
| 7/8 CoCCiDioiDoMaTa (sted) |  |  |
|  | 16 letters <br> CoMMoN PRoSTiTuTe (OED phrase) |  |

## WORDS IN WHICH ALL THE CONSONANTS ARE REPEATED

These words are rare. In each of these 3 examples, the consonants are in alphabetical order and each consonant appears twice: iMMaNeNeSS (w2), JeJuNeNeSS, NoN-aPPeaReR In iSSeGGeDDa (a wadi in Mali), the consonants are in reverse alphabetical order and each like pair occurs as a doubled letter.

## WORDS WITH BOTH CONSONANT AND VOWEL ORDERLINESS

So far we have concentrated on consonant orderliness. Now let us introduce a second constraint by way of vowel orderliness. Suppose we require all five vowels to appear just once in the word. The search is then restricted to AEIOU words in which the five vowels occur in alphabetical, or reverse alphabetical, order.
Both Consonants and Vowels in Alphabetical Order
8 letters: aFeLiouN (Irhzer Afelioun is a stream in Morocco), DaLeiTou (China), HaReiouS,
9 letters: aCHeiLouS, aCHeiRouS (w2), aCHeRiTou (Cyprus), GaNNeiouS (Hodge)
10 letters: BaDDeiZZou (a hill in Mauritania)
11 letters: CHLaeNioPuS (nz)

Both Consonants and Vowels in Reverse Alphabetical Order
8 letters: SuLoiDea (nz)
11 letters: VuoSSiSeLKa (hill in Finland)
Consonants in Alphabetical Order, Vowels in Reverse Alphabetical Order BuRRoTieTa (Ecuador)

## Consonants in Reverse Alphabetical Order, Vowels in Alphabetical Order Ta-Pei-Kou (China), YaNMeiLou (China)

The paucity of examples with the consonants in alphabetical order and the five vowels in reverse alphabetical order, at least in non-location words, is probably because a high percentage of UOIEA words have the letter L as their final consonant, thus restricting the choice of the $2(+)$ preceding consonants to eight. The paucity of examples with the consonants in reverse alphabetical order and the five vowels in alphabetical order is probably because almost all of the 'AEIOU in order' words (non-locations) end in M, N, S or Y. This dictates that the preceding $2(+)$ consonants have to appear further along the alphabet than $\mathrm{M}, \mathrm{N}, \mathrm{S}$ and Y respectively, which is increasingly unlikely in the case of $M, N$ and $S$, and impossible in the case of $Y$.

## ALPHOMIC WORDS

Alphomic words are those in which all the letters appear in alphabetical order. It follows that, in these words, consonants appear in alphabetical order, and vowels appear in alphabetical order. The opposite applies in the case of reverse alphomic words. The longest alphomic, and reverse alphomic, words to appear in Word Ways are the 8 -letter AEGILOPS and TROLLIED respectively. I believe that the following 8 -letter locations are new to Word Ways. Note that ACHIMOVY and TRONJICA do not have any repeated letters.

Alphomic Words<br>ABDENNOR (Morocco)<br>ACH'IMMOT (S. Korea)<br>Reverse Alphomic Words<br>SOOJIIDA (Somalia)<br>ACHIMOVY (Russia)<br>SOONKHED (India)<br>BELLOSSY (France)<br>CEILLOUX (France)<br>CHIN-O-SSU (China)<br>DEGIILOW (Heyreeringa D... is an area in Somalia)<br>DEHINOOR (a spring in Oman)<br>TRONJICA (hill in Yugoslavia)<br>WURROONG (Wooggooddy W... is a well in Australia)

## SPECIAL WORDS

A few of the above words deserve a special mention:
BaiLLiLLiLLy - three like doubled consonants
aCiDaMiNuRiaS - three sets of 2 alphabetically-adjacent consonants: $\mathrm{C}+\mathrm{D}, \mathrm{M}+\mathrm{N}$, and $\mathrm{R}+\mathrm{S}$ FLaMeN-PRieST - two sets of 3 alphabetically-adjacent consonants: $\mathrm{L}+\mathrm{M}+\mathrm{N}$ and $\mathrm{R}+\mathrm{S}+\mathrm{T}$ uNMiLKeD - a reverse set of 4 alphabetically-adjacent consonants: $\mathrm{N}+\mathrm{M}+\mathrm{L}+\mathrm{K}$

