A HOMOVOCALIC SURVEY

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A homovocalic (HV) is a word with one or more vowels, in which all the vowels are the same. ANAGRAM is a homovocalic. Originally christened ‘vocalic invariants’ by Dmitri Borgmann in Language on Vacation (LonV), they have been called monovocals, sometimes univocals, in Word Ways. I prefer homovocalic, meaning ‘same vowel’, to mono- or univocalic both of which are misnomers in this context because they mean ‘one vowel’. They should be reserved for words such as STRENGTH in which all the letters except one are consonants. This article offers an overview of previous homovocalic material, adding and improving where appropriate. It also introduces HV genres new to Word Ways. All the words are solid, and the contentious ‘sixth vowel’ Y is nowhere in sight. With one exception, XAXAX, all the palindromes can be found in The Palindromicon II by Jeff Grant and Dan Tilque (Word Ways Monograph Series 6, 2002). Unreferenced, non-palindromic words, with the exception of locations, can be found in the Oxford English Dictionary, Second Edition, including the text. Locations, identified by country, are taken from the United States Board on Geographic Names. Other references are: cham Chambers Dictionary; cad Coopers Archaic Dictionary; cdz Collegiate Dictionary of Zoology by Robert W. Pennack; edd English Dialect Dictionary; Hodge Handbook of American Indians ed. by F.W. Hodge; Web2/3 Webster’s 2nd/3rd Editions; wnh Words, Names and History ed. by Peter Jackson, 1995.

LONGEST HVS

What are the longest HVs for each vowel, irrespective of the number of vowels?
Sir Jeremy Morse (WW2000224) offered the following words from Chambers and/or the OED:
TARAMASALATAS (13), STRENGTHLESSNESS (16), DISINHIBITING (13), STRONGROOMS (11), UNTRUTHFUL (10)
These can be equalled by...
PRIMITIVISING (13), DUMBSTRUCK (10 - cham), UNTRUSTFUL (10)
... and improved upon with...
TARANTARRATARA (14 - 2003151), CHLOROBROMOFORM (15), LOXOLOPHODONTS (14 - fossil mammals) and also the 20-letter CHRONONHOTONTHOLOGOS, all in the OED, the last 2 being noted by Borgmann in LonV. The last is the name of an 18th century stage farce by Henry Carey, disputed composer of ‘God Save The King’. The farce resulted in the word becoming commonly used to describe a blustering, ineffective person. Subsequently it appeared as the name of a street in novels by Terry Pratchett!
By extending the search beyond the OED and Chambers even longer examples can be found for A, E and U:
TATHAGATAGARBHA (Web3) has 15 letters, but MARADANKADAWALAGAMA (Sri Lanka) has 19 letters.
Also to be found are the 19-letter MARADANKADAWALAGAMA (Sri Lanka) and the 17-letter ELSENERVELDENVEEN (Netherlands) has 17 letters.
STRULDBRUGS (in Gulliver’s Travels) has 11 letters. With 14 letters, BUBUBUBUBUBUBUBU (used to suggest the sound of wings flapping), in A Dictionary of Jamaican English, has made several appearances in Word Ways.
HVS WITH THE MOST VOWELS

Which HVs have the greatest number of vowels, irrespective of the length of the word?

Using any English Language Dictionaries, Jeff Grant (WW97086) offered TARAMASALATA with its 6 As, DEGENERESCENCE with its 6 Es, and COONOOMOONOO, BOONOONOO and WOOLLOOMOOLOO, each with 8 Os. Darryl Francis (WW2003151) noted PEEKEEENEENEE with 8 Es. Jeff used the tautonymic BUBUBUBUBUBUBUB as his ‘most Bs’ example but, with 7 Us, it can also be used as the example with most Us.

MARADANKADAWALAGAMA (above) has 9 As.

ELSENERVELDENVEEN (above), with its 7 Es, does not quite equal PEEKEEENEENEE with 8 Es. The most Is appears to be 6, found in INDIVISIBIL. In IRITIRITIRMIRIM, the name of a railroad stop in Brazil, the 6 Is alternate with the consonants.

MOODOOGOROO (Australia) can be added to the words above which have 8 Os. However, with 9 Os, POTOOOOOOO, the name of a British race horse born in 1773, appears in LonV.

Two non-tautonymic U examples, AUGUSTUDUNUM and SFUGUNUGUMUT (Hodge), each have 5 Us. The tautonymic WURUDUWURUDU (Ghana) has 6 Us.

HVS WITH LEAST VOWELS

From HVs with the most Vs, we turn to the other extreme where all the letters except one are consonants. These HVs can suitably be called univocalics. What are the longest univocalics for each vowel? It is noteworthy that most of these words include the letter H, often as part of the trigram SCH, sometimes more than once.

A - with 11 letters, MKRTSCHJANS, the pluralised US surname MKRTSCHJAN (WW95149), appears to be the longest. Other long univocalics are the 10-letter STRANGHTHS, a variant of ‘strengths’. This is equalled by BARSCHTSCH (Papua NG), unusual in having the solitary vowel so near the beginning of the word. Borgmann mentions the 9-letter US pluralised surname HRNCSJARS in LonV.

E - the 10-letter STRENGTHS is another variant of ‘strengths’. This is equalled by WPPWRMWSTE (uppermost), and also ZSCHETZSCH (Germany) which begins and ends with the tetragram ZSCH. With 9 letters, STRENGTHS itself is equalled by FLESCHSCH (flesh).

I - in LonV, Borgmann notes the 11-letter SCHJISCHTSCH, a 19th century market town in the Volhynia region of Russian Poland, as appearing in a circa 1866 edition of Lippincott’s Gazetteer of the World. Note that the trigram SCH appears 3 times. TSCHIRTSCH (Austria) has 10 letters.

O - Borgmann also notes the 10-letter Jean Georges TSCHORTSCH, a swiss priest and music composer who flourished about 1725. Note that in TSCHIRTSCH (above) and TSCHORTSCH it is only the vowel which differs. Both begin and end with the tetragram TSCH.

U - SCHWULSTS (South Africa) has 9 letters, as has SCHLUCHTS (several locations called Schlucht - Chile, Namibia etc.).

VOELOWE HEAVY HVs

Vowelwise, univocalics are the lightest possible HVs. So what about vowel heavy HVs? Any word with more vowels than consonants can be said to be vowel heavy. The degree of heaviness depends on the relative numbers of Vs and Cs. The words below all have at least twice as many Vs as Cs. The ratios show the number of Vs and the total number of letters. The examples begin with words which have exactly twice as many Vs as Cs (ratios 4/6, 6/9, 8/12).

4/6 There are a substantial number of HVs, including tautonyms, with the letter pattern cVVeVV. These include: JAAMAA (Finland), ZAAZAA (Tunisia), BEEBEE (Australia), CEEPEE (Canada), GEEGEE, NEEJEE (= nitchie, a derogatory term for a N. American Indian), PEEWEE, TEEPEE, JICHI (Somalia), PIPIII (Dictionary of Jamaican English), KOODOO or COODOO (an African antelope). Words with the pattern VVc are

In these HVs:

ANATA (emir), ERIO

More unusual names in alchemy

ALAMAA (Kenya), OOL

Programming:

3/4 (cad), FAAAD (Salvador), TIRIL (Estonia), US

4-letter words in single consonant.

AABA - AAD

ABAA - AAD

EED - EAD

EEDEE - EED

IIRI - IRA

OBO - OBO

UKU - UGU

CUK - UKU

5/6 EE

The ultimate 'the' of 

A number of 4/6, 6/9, 8/12, 9/15, 11/17 +

An article by

KAAAWA

SEER, WE

Possibly St

Jeff also in 

WW8/15
antelope), VOODOO, BOOBOO, MUUMUU (a loose dress in Hawaii). A few have the reverse letter pattern VVcVVc: AAGAAD (Russia), AARAAR (Lebanon), OOZOON (Iran).

In these HVs, which include palindromes, the Vs are arranged symmetrically in the word: ANAATA (cdz), AAOQAA (Syria), AAKAKA (New Zealand), EEBREE (eyebrow), EEEZEE, EEMERE (emir), EEEREERE (Fiji), EETEETE (Eq. Guinea), EXEEEME (= exeme, to set free), ILILLI (Samoa), OROOOPO (Australia), OKKROO (okra), OOLLOO (Australia), OCOOCO (Eq. Guinea), UKUUKU (Solomon Is.).

More unusual are HVs which do not abide by any of the above vowel patterns: AAABAM (a name in alchemy for the element lead - Lonv), AAAMAR (Lebanon), AAARDA (Syria), AALAQA (Lebanon), ALAMAA (Finland), KAAAWA (Hawaii), EREEZEE (Belgium), REEENE (Mozambique), LOOOOT (Kenya), OOOOPS (oops), OOBOTO (Mongolia), OPOOO (Samoa).

6/9 AVAAAVAA, AAAATAMAD (Egyptian name of a town in Palestine - cad), NAATAAAPA (Finland), BEEVEEDEE, ROOCOOOCOO (to coo).

8/12 PEEKEEENEENEE (piccaninny), MOODOOOGOROO (Australia).

Progressing to greater degrees of vowel heaviness...

3/4 4-letter words which exhibit 3 like vowels include: AAAB (an Egyptian, the son of Kherab - cad), FAAA (Tahiti), NAAA (Mozambique), TAAA (Morocco), WAAA (Egypt), ESEE (easy), SEEEL (El Salvador), TEEE (Australia), IRII (Japan), DOOO (Ivyory Coast), OONN (wnh), OORO (Somalia), UULU (Estonia), UURU (Solomon Is).

4-letter words with 3 like vowels lend themselves to the formation of word ladders in which the single consonant is the letter which changes:

AABA - ADAA - AAFA - AAKA - AALA - AAMA - AANA - AARA - AASA - AATA - AAVA - AAWA - AZAA (Chad) (Yemen) (Syria) (Mali) (Vanuatu) (Iraq) (Lebanon) (Cyprus) (Norway) (Sudan) (Sweden) (Papua NG) (Lebanon)

ABAA - AADA - AGAA - AGHA - AHAA - AJAA - AKAA - ALAA - ANAA - APAA - ARAA - ASAA - ATAA (Djibouti) (Ghana) (Norway) (Solomon Is) (Uganda) (Finland) (Algeria) (Marshall Is) (Nigeria) (Tanzania) (Denmark) (Greenland)

EEDE - EEFE - EEKE - EEEE - EEME - EEER - EESE - EEET - EEVE - EEZE (Belgium) (easy) (eke) (eme) (ene) (ese) (eat) (eve) (Netherlands)

III - IIIT - IIWI (Somalia) (Guinea) (Brazilian honeycreeper bird)

OBOO - OCDO - OKOO - OLOO - OVVOO - OWOO (Congo Rep) (Mozambique) (Benin) (Kenya) (China) (Mongolia)

UKUU - UMUU - UVUU (Tanzania) (Solomon Is) (Kenya)

4/5 HVs with the pattern VVcVVc are palindromes. They include AAZAA (Lebanon), EENEE (eeny), OOLLOO (a domestic Eskimo cutting implement), and UUPUU.

Non-palindromic examples include AAATA (a beetle; also a sponge), and EEEEEE (‘yes’ - edd).

5/6 EEEEEE (native name of the ‘iiwi’ bird)

The ultimate degree of vowel heaviness occurs in words consisting entirely of a repeated vowel. These include: AAA (chief of the signet bearers in the court of the Egyptian king Aspalut - cad), EEE (‘the’ - edd), II (town in Finland), OO (a honeyeater bird - Web3), UU (yew).

**HVS WITH 3 OR MORE CONSECUTIVE VOWELS**

A number of words with 3 or more consecutive like Vs appear in ‘Vowel Heavy HVs’ above (see 4/6, 6/9, 3/4 and 5/6). A selection of words with 3 or more consecutive identical letters appear in an article by Jeff Grant (WW81154) and these, fortuitously, include a selection of HVs:

KAAAQA, FAAA, AAA, AAB, AATARAA, AAAB, SEEEER, WEEEEST, OEEEEE, EEE, EEEEEE (‘yes’ - edd).

Possibly SHIIIM from Walker’s Dictionary.

Jeff also includes the interjections AAAARGH, EEEEEK, and OOOO.

In WW83157, David Rosen added VEEE (Julie Veee was a professional soccer player).
Here are further examples:
HAAAAN and RAAAAN (both Norway), MALAAAPA (Finland), SHAAAT (Libya), VASSBRAAA (Norway), AGREEETH, BEEEEEEN (been), BEEEST (beast), FREEER, FREEEST, GREEE (weeping), SLEEEEEST (slay v.), REEENBERG (Netherlands), SEEENDE (Germany), SKEEEERE (Hodge)
NSNTISIII Chaung (Burma)
BOOON (Somalia), NGOOOLO (South Africa), OOLEOLBOOOL (Russia), OOOOH

Len Deighton’s *Funeral in Berlin* includes the words “There was a great Ooohh and Aaahh as the rocket burst”.

**READY MADE HVS**

At least 3 groups of words can be regarded as ready made HVs because the choice of letters available in each case includes only one of the 5 vowels. This means that every word which includes at least one vowel is HV. The 3 groups are Roman words, Prime words and Ascenders.

**What is the longest HV made exclusively of Roman numeral letters (I, V, X, L, C, D, M)?**
The only vowel is ‘I’ and the longest solid Roman HV appears to be the 10-letter tautonymic LLIVILLIVI (Chile).

**What is the longest prime HV?**

Prime words are constructed from letters occupying prime number positions in the alphabet: B(2), C(3), E(5), G(7), K(11), M(13), Q(17), S(19) and W(23). The only vowel being E, it follows that all prime words with at least one letter E are HVs.

In WW to date, and discounting EEEEEEEE, the longest solid prime words have 7 letters (99014 and 2001132). SWEEGES (*edd* is one such. Making their introduction here, however, not only as the longest prime HVs, but also as the new longest solid primes, are the following 10-letter words: EMBEKEBEEK (Belgium), MESSESSEGES (Mozambique), and the tautonymic KEMBEKEMBE (Solomon Is.) and QWEBEQWEBE (S.Africa).

**What is the longest HV made of ascenders?**

All letters with an extension to their body are called tall letters. There are tall letters with ascenders (b, d, f, h, k, l, t) and tall letters with descendents (g, j, p, q, y). The letter ‘i’ is regarded in WW as an optional additional ascender and, as the only vowel, a requisite in order to make HVs.

The longest I found is the 10-letter tautonymic DHIIBDHIIB (Somalia). This is also a new longest solid ascender, the previous longest in WW being the 9-letter TITTIFILL (99182).

**HV ISOMORPHS**

HVs lend themselves to the formation of sets of A, E, I, O, U mutual isomorphs.

| C A S A V A  | S A M P A A N  | W A L L A H  |
| S E V E R E  | G E N T E E L  | F E N N E L  |
| B I K I N I  | X I P H I I D   | T I F F I N  |
| K O M O D O  | B O X R O O M   | B O T T O M  |
| T U C U M U   | C U R T U S     | H U M M U S  |

(Hodge) (courteous)

The isomorphic HVs LESSER and COMMON are near antonyms.

**CHANGING HVS INTO OTHER HVS**

Changing HVs into other HVs can be achieved in 3 basic ways. In the first, all the original letters are retained (‘Producing Offspring’ below); in the second, one or more, or all, of the letters are changed (‘Rotating Vowels’, ‘Shifting Letters’); in the third, letters are added.
Producing Offspring

The letters of a HV parent may be rearranged to produce 2 HV offspring. Note that INDIVISIBILI produces its offspring by splitting down the middle.

<table>
<thead>
<tr>
<th>DEGENERESCE</th>
<th>TARAMASALATA</th>
<th>INDIVISIBILI</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEGREES</td>
<td>ENCENCE</td>
<td>VIDINI</td>
</tr>
<tr>
<td>(insense n.)</td>
<td>(small evergreen tree in New Zealand)</td>
<td>(Latvia)</td>
</tr>
</tbody>
</table>

Rotating Vowels

Groups of 5 words in which the vowels are rotated, such as BAD, BED, BID, BOD, BUD appear in WW68156, 751909, 98064 and 200253 etc. In all cases, only one vowel is rotated, even in words with more than one vowel. In the first example below, however, 2 vowels are rotated whilst in the palindromic example 4 vowels are rotated.

<table>
<thead>
<tr>
<th>M A N A S</th>
<th>A T A A T A</th>
</tr>
</thead>
<tbody>
<tr>
<td>(menace n.)</td>
<td>(a shellfish)</td>
</tr>
<tr>
<td>M E N E S</td>
<td>E T E E T E</td>
</tr>
<tr>
<td>(means v.)</td>
<td>(in Equatorial Guinea)</td>
</tr>
<tr>
<td>M I N I S</td>
<td>I T I I T I</td>
</tr>
<tr>
<td>( mines v.)</td>
<td>(sister of Rupe in Maori mythology)</td>
</tr>
<tr>
<td>M O N O S</td>
<td>O T O O T O</td>
</tr>
<tr>
<td>(a type of uniforms)</td>
<td>(shallow - Lau)</td>
</tr>
<tr>
<td>M U N U S</td>
<td>U T U U T U</td>
</tr>
<tr>
<td>(Latin: duty n.)</td>
<td>(a turtle in Polynesian mythology)</td>
</tr>
</tbody>
</table>

Shifting Letters

The letters of a HV can be shifted a number of steps along the alphabet (looping from Z to A) to form another HV. Thus LANA + 4 = PERE.

A shifted to E: ARAN + 4 = EVER
E shifted to I: GENE + 4 = KIRI
A shifted to I: AVA + 8 = IDI
E shifted to O: BEEF + 10 = LOOP
A shifted to O: PAPA + 14 = DODO
E shifted to U: DEDE + 16 = TUTU
I shifted to O: MINI + 6 = SOTO
O shifted to U: BOOM + 6 = HUUS (house)
I shifted to U: FIFI + 12 = RURU (a Maori owl)

BANANA + 4 = FERERE = REEFER is a HV shiftgram in which the 3 As shift to 3 Es before being rearranged along with the other shifted letters.

Adding Terminal Letters

One HV can be changed into another HV by adding a single letter at the end of a word to make a new word, again and again. Alternatively, as in the cases of I and O below, the letter can be added at the beginning of the word.

<table>
<thead>
<tr>
<th>AA</th>
<th>AAR</th>
<th>AARD</th>
<th>AARDAL</th>
<th>AARDAL</th>
<th>AARDALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>India</td>
<td>Netherlands</td>
<td>(Norway)</td>
<td>(lake in Norway)</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>AAR</td>
<td>AARD</td>
<td>AARDAL</td>
<td>AARDALS</td>
<td></td>
</tr>
<tr>
<td>(Egypt)</td>
<td>(Finland)</td>
<td>(Chad)</td>
<td>(Japan)</td>
<td>(Zambia)</td>
<td></td>
</tr>
<tr>
<td>AAR</td>
<td>AARD</td>
<td>AARDAL</td>
<td>AARDALS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Burkina Faso)</td>
<td>(Lebanon)</td>
<td>(Norway)</td>
<td>(lake in Norway)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AAB</td>
<td>AABAA</td>
<td>AABAB</td>
<td>AABABBA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Somalia)</td>
<td>(Ecuador)</td>
<td>(Benin)</td>
<td>(Nigeria)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AAB</td>
<td>AABAA</td>
<td>AABAB</td>
<td>AABABBA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EE</td>
<td>EEN</td>
<td>EENDER</td>
<td>ELELE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>HII</td>
<td>SISHII</td>
<td>ITI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPS</td>
<td>UU</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UID</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Adding Letters to make Constrained Pyramids

The first pyramid is made of locations; it contains no palindromes. Apart from the first word in each case, the 2nd to 5th pyramids are made entirely from palindromes.

<table>
<thead>
<tr>
<th>AB</th>
<th>BAA</th>
<th>ABAA</th>
<th>BAABA</th>
<th>BABABA</th>
<th>BABABBA</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Egypt)</td>
<td>(Burkina Faso)</td>
<td>(Somalia)</td>
<td>(Ecuador)</td>
<td>(Benin)</td>
<td>(Nigeria)</td>
</tr>
<tr>
<td>EL</td>
<td>ELE</td>
<td>ELE</td>
<td>ELE</td>
<td>ELE</td>
<td>ELE</td>
</tr>
<tr>
<td>IT</td>
<td>ITI</td>
<td>ITI</td>
<td>ITI</td>
<td>ITI</td>
<td>ITI</td>
</tr>
<tr>
<td>SO</td>
<td>SOS</td>
<td>SOOS</td>
<td>SOSOS</td>
<td>SOSOS</td>
<td>SOSOS</td>
</tr>
<tr>
<td>US</td>
<td>SUS</td>
<td>SUUS</td>
<td>SUSUS</td>
<td>SUSUS</td>
<td>SUSUS</td>
</tr>
</tbody>
</table>
HOMOCONSOVOCALICS (HCVs)

Each of the 5 constrained pyramids immediately above is also special in being made of words which are constructed of just 2 different letters of the alphabet, a consonant and a vowel. Such words are homoconsovocalics (HCVs). The words involved in the ATAATA palindromic vowel rotation above (see ‘Rotating Vowels’) are also HCVs.

Longest HCVs

In WW2000224, Dave Morice asked “What are the longest monoconsosvocalic words for all consonant/vowel combinations?” Here I attempt to answer the question with solid words. One example is given for each of the 20 C/V combinations for each of the 5 vowels.

Most of the longest, solid HCVs are either palindromes or tautonyms. Some of the tautonyms appeared in my Multiple Bigrams (WW2000243). With the exclusion of palindromes, the sources of the words are given. Being in a minority makes those HCVs which are neither palindromes nor tautonyms all the more interesting and these are underlined. Joycean eccentricities are not included.

**BABABBA** (Nigeria), **CACCACCA** (Peru), **DADADDA** (Zimbabwe), **FAFAFA** (Mozambique), **AGAAGA**, **AHAAHA** (New Zealand), **AJAJAJA**, **KAKAKAKA** (Maori), **ALALALA**, **AMAMAMAMA**, **ANANANANA**, **APAPAPAPA**, **QAQAQ**, **ARARARARA**, **ASSASSA** and **AATAATA** (both Morocco), **AVAVAVAA**, **AWAWAA**, **XAXAX** (the name of a Doberman-Smooth Collie owned by Mary-Anne E. Ardini), **AZAZA** (Tunisia)

**BEEBEE** (Hindustani name for a lady), **EFECE** (‘yes’ - edd), **DEEDEED**, **FEFFEFE** (feoffee), **GEGGEE**, **HEHEHEH**, **EJJE**, **KEEKEE** (a parasitic plant), **ELELEE** (a village in Hawaii), **MEMMEM**, **ENEENE**, **EPEPEPE**, **EQE**, **EREERE** (Fiji), **SEESEES** (partridges), **TEETEE** (the diving petrel in New Zealand), **EEEEEVE** (the Hawaiian bird ‘iwi’), **WEWEE**, **XEXEX**, **EEZZZE**

**IBIBI**, **CICICI** (Fiji), **DIDIDI** (Fiji), **IFIFI**, **GIGIGI** (Mozambique), **IHIIHI**, **JIIJII** (South Korea), **KIKIKIKI** (Maori), **LLIIIL** (Chile), **MIMMIM**, **NININI** (Fiji), **PIPIPI** (New Zealand), **QIQI** (China), **RIRIRI** (Maori), **ISSISSI** (Congo Rep.), **TIITTITI** (Ethiopia), **IVIVII**, **IWIIWI**, **IXIXI**, **IZIZI** (Uganda)

**OBOOBO**, **OOCOOCOO**, **DODODO** (Gershin’s Oh Kay), **FOOFOO** (fufu - a kind of dough), **GOOGOO** (Somalia), **OHOOHO**, **OJOJO**, **OKOKOKO** (Congo), **OOLLOO** (Australia), **OMOMO**, **NOOONNOO**, **POPOPOPO** (Maori), **QQQQ**, **ROROROR**, **SOOSOOS** (Gangetic dolphins), **TOTTOT** (a fruit pigeon of Guam), **VOOVOV** (Denmark), **WOOW**, **XOXXOX**, **ZOZOZ**

**BUBUBUBUBUBUBUBU** (Dictionary of Jamaican English), **UCUUCU**, **DUDUDU** (S. Africa), **UFUUFU** (Zambia), **UGUUGU**, **UHUHUH**, **JUJJJ**, **KUKUKUKU** (Web3), **ULLULLU** (Peru), **MUUMUU**, **UNUUNUN**, **PUPUP**, **UQUUQU**, **RURURURU** (Maori), **SUSUSUS**, **UTUUTU** (a turtle in Polynesian mythology), **UVUVU**, **UWWUWU**, **UXU** (Tibet), **UZUZU**

**PHRASES**

Progressing from single word to multi-word HVs, each of these phrases has at least 4 vowels:

**BALACLAVA CAP**, **CANADA BALSAM**, **CARAVAN PARK**, **CATCH AS CATCH CAN**

**EVEN TEMPERED**, **EXPRESS MESSENGER**, **LETTER SEQUENCE**, **RESETTLEMENT CENTRE**

**DISTRICT VISITING**, **FISHING LIMIT**, **IN HIGH SPIRITS**, **LIVING IN SIN**, **STRIKING IT RICH**

**FROM TOP TO BOTTOM**, **ROLL ON ROLL OFF**, **SONG OF SOLOMON**, **TO STOP SHORT OF**

**TUKE TUKU** (Maori decorative reed panels)

The above phrases were chosen specifically because they do not include any doubled vowels. By way of contrast, these phrases incorporate 2 doubled vowels:

**DEEP FREEZE**, **FREE WHEEL**, **GREEN CHEESE**, **STREET SWEEPER**, **THREE CHEERS**

**GOOD LOOKS**, **MOON BOOTS**, **POOL ROOM**, **SCHOOL BOOK**, **VOODOO DOCTOR**

These phrases rhyme:

**FAN TAN**, **FAT CAT**, **PALL MALL**

**BEES KNEES**, **GENDER BENDER**, **FLEET STREET**, **HELTER SKELTER**, **JEPPERS CREEPERS**
LONGER PHRASES, SENTENCES AND VERSES

Readers will be familiar with the HV palindrome A MAN, A PLAN, A CANAL, PANAMA. These E, I, O and U examples are my offerings:
THE GREEN BEECH TREES SET THE EXCELLENT SCENE BETWEEN THE TEMPLES WITH HINDSIGHT, I STILL THINK IT'S HIS FIRST FIGHT IN MISSISSIPPI
JO TOOK TWO SHORT HOPS DOWN TO COLD OLD MOSCOW
HUGH CUTS UP SPUDS BUT SNUBS PUDS

In Word Games for Play and Power (Prentice-Hall, 1962), Joseph T. Shipley notes the following inscription cut in stone on a church in Wales over the Ten Commandments:
PERSEVERE YE PERFECT MEN,
EVER KEEP THESE PRECEPTS TEN.

In The Game of Words (Wolfe Publishing, 1971), Willard Espy offers three HV verses which use the vowels A, E and O respectively. Here is his A verse, entitled The Russo-Turkish War:
WAR HARMS ALL RANKS, ALL ARTS, ALL CRAFTS APPAL;
AT MARS' HARSH BLAST, ARCH, RAMPART, ALTAR FALL!
AH! HARD AS ADAMANT A BRAGGART CZAR
ARMS VASSAL-SWARMS, AND FANS A FATAL WAR!
RAMPANT AT THAT BAD CALL, A VANDAL BAND
HARASS, AND HARM, AND RANSACK WALLACH-LAND.
A TARTAR PHALANX BALKAN'S SCARP HATH PAST,
AND ALLAH'S STANDARD FALLS. ALAS! AT LAST.

The HV sentence ORTHODOX DON'S KNOW GOOD PORT FROM POOR, and various HV poems can be found in WW73104 and WW73170.

These 4 palindromic HVs appear in Howard Bergerson’s Palindromes and Anagrams (Dover Publications, 1973) and are thought to be attributable to Leigh Mercer:
LEPERS REPEL WE SEVEN, EVE, SEW SIR, I'M IRIS TOO HOT TO HOOT

Leigh Mercer offered three HV haikus (WW85176), this one aptly entitled The Haiku of the Eyes:
IN TWILIGHT THIS SPRING
GIRLS WITH MINISKIRTS WILL SWIM
IN STRING BIKINIS.

In WW86155, Paul Hellweg presented 5 verses, each a HV variation of Mary Had a Little Lamb.

A variation on HV phrases and sentences is a sentence made of successive groups of HV words, each group using one of the 5 vowels. This sentence thus uses the vowels in the order E, U, I, O and A respectively:
THE JET SET, PUNCH DRUNK WITH HIGH LIVING, GO TO TOWN AND WALK TALL

Similarly, the individual lines of a verse may be HV. In this particular verse, the HV lines occur in AEIOU order.

A HAND BAGS, GLAD RAGS.
E BERETS GREEN SET THE SCENE.
I TIGHT FITS, THICK MITTS.
O SHOP FLOORS, LOTS OF DOORS.
U PLUM PUMPS TURN UP TRUMPS.

Places

There exist many locations with HV names. Here are a few, all with at least 3 vowels.

Islands

MADAGASCAR, CELEBES, ELLESMERE, COMORO
Country Capitals
ANKARA (Turkey), ASHKHABAD (Turkmenistan), ASMARA (Eritrea), CARACAS (Venezuela), HAVANA (Cuba), JAKARTA (Indonesia), KAMPALA (Uganda), MANAMA (Bahrain), TARAWA (Kiribati), TBILISI (Georgia), COLOMBO (Sri Lanka)

States of USA
ALABAMA ALASKA ARKANSAS MISSISSIPPI TENNESSEE

US Counties (States in brackets)
ALFALFA (Okla) ARANSAS (Tex) ARKANSAS (Ark) ATTALA (Miss)
BARAGA (Mich) CALLAHAN (Tex) CATAWA (NC) CLACKAMAS (Ore)
MAHASKA (la) KALKASKA (Mich) KANAWHA (W Va) LACKAWANNA (Pa)
LAMPASAS (Tex) LAVACA (Tex) MANASSAS (VA) SAN SABA (Tex)
SANTA BARBARA (Calif) SANTA CLARA (Calif) WABASHA (Minn) ZAPATA (Tex)

ZAVAFA (Tex)
GENESEE (Mich, NY) GREENE (Ala, Ark, Ga, Ill, la, Ind, Miss, Mo, NC, NY, Ohio, Pa, Ten, Va)
GREENLEE (Ariz) KENNEBEK (Me) MEEKER (Minn) MELLETTE (SD)
REEVES (Tex) STEELE (Minn, ND) WHEELER (Ga, NE, Ore, Tex)
MISSISSIPPI (Ark, Mo)
AROOSTOOK (Me) COSHOCTON (Ohio) COTTONWOOD (Minn) OCONTO (Wisc)
PONTOTOC (Miss, Okla) ROSCOMMON (Mich) SOCORRO (NM) WOODFORD (Ky)
WOODSON (Kan)

British Isles (a small selection)
SLAMANNAN (Scotland), PETERLEE (Durham), SHEERNESS, TENTERDEN, GRIMINISH, KILWINNING (Scotland), LOCH LOMOND (Scotland), WOODSTOCK (Oxford)

LANGUAGES
The world’s languages include many HVs with 3 or more vowels. Here are a few of them.
The Bantu people have many languages some of which follow the V-C pattern cVcVcV:
MASABA, KEREBE, TIRIKI, HORORO, KOMORO, POGOLO, BUKUSU, RUGURU
Languages with different V-C patterns include more from the Bantu... BASAA, TAABWA, NDEBELE, KISSII, TOORO, UMBUNDU (all Bantu)
...as well as BAHASA(Malay-Indonesia), BWAANABA (Kiribati), CATALAN (Spain/France/Andorra), KANNADA (India), KARAKALPAK (Kazhak), MABAAN (Luo), PAMPANGAN (Austronesian) is a ‘ladder word’ (see Ladder Words 2002279), GEECHEE (English Creole), YEKEHEE (Edo), OROMO (Cushitic), KUKUKUKU (Papuan)

PERSONALITIES
A considerable number of personalities, from various walks of life, have HV names. Here is a small selection.
RALPH ADAMS CRAM (architect, cathedral of St. John the Divine NYC), AGA KHAN, ALAN ALDA, ALAN LADD, ANWAR SADAT, BARBARA BACH, CARL SAGAN, JACK BRABHAM (motor racing), BERT WHEELER, ELLEN DREW, HELEN KELLER, MEL FERRER, PETER SELLERS, RENEE ZELLWEGER, WERNER KLEMPERER, CHRIS PHILLIPS, INGRID PITT, BILL IRWIN, DOCTOR JOHNSON, JOHN OGDON (organist), SOLOMON, OTTO SOGLOW (cartoonist - Canyon Kiddies)

FILM, OPERA AND POP
Film and Opera
CASABLANCA, LA GAZZA LADRA (Rossini)
Pop
LITERATURE

Titles (authors in brackets)
BAB BALLADS (W.S. Gilbert)  BRAT FARRAR (Josephine Tey)  THE BEE (O. Goldsmith)
BEST SELLER (O Henry)  EDEN END (J.B. Priestley)  THE LETTER (W. S. Maugham)
PETER BELL (W. Wordsworth)  RED PEPPERS (N. Coward)  THE TEMPEST (Shakespeare)
WHIRLIGIGS (O Henry)  WOODSTOCK (Sir Walter Scott)
NOSTROMO (J. Conrad)  LURULU (Lord Dunsany)
LUCULLUS (Shakespeare)  Characteristics (authors in brackets)

Characters (authors in brackets)
BALTHAZAR (Shakespeare)  BARABAS (C. Marlowe)  DA DANA (Kipling)
DE MENDEZ (J. Swift)  HELEN BELLEW (Galsworthy)
PHILIP PIRRIP (Dickens)  JOHN BOSTOCK (R. Church)

PLANTS AND ANIMALS

HV Plants include: BANANA, CALABASH, JACARANDA, MARRAM GRASS, SAISAFRAS,
EVERGREEN, SPEEDWELL, IRIS, COTTONWOOD, DOGWOOD, MONKSHOOD, FUNGUS

Animals: AARDVARK, ALPACA, AMADAVAT or AVADAVAT (Indian song bird), BLACK
MAMBA (snake), CARACAL (lynx), CARACARA (vulture-like bird), MATAMATA (a turtle),
HELLBENDER (salamander), LEVERET (young hare), TREECREEPER (bird), TREE SHREW, INDRIS
(a lemurine animal), SISKIN (bird), KOOKOO or COODOO (antelope), MOORCOCK (bird), POTOROO
(kangaroo-rat), WOODCOCK (bird), CUSCUS (a marsupial)

MISCELLANEOUS

Finally, here are some long HVs which abide by a miscellany of constraints.

Curved letters (C J O S U) - COOSCOOSOOS (11)

Straight line letters (A E F H I K L M N T V W X Z) - KAWAKAWAMALAMALA (16 - Fiji),
EKHETHEKETHE (13 - S. Africa), KINNIKINNIK (11), LIMLIMTIMI (11 - Papua NG) and
KILKINNIK (11 - Ireland)

Horizontally symmetrical letters (B C D E H I K O X) - CHECHECHE (10 - Turkmenistan),
CHIICHICH (10 - Solomon Is.), DHBDHIBIC (10 - Somalia), CHOCCOCHOCCO (12 - Peru)

Vertically symmetrical letters (A H I M O T U V W X)
MAMMAMATTAWA (12 - Canada), VITIMITIMI (10 - Fiji), MOHOHOHO (8 - the white rhinoceros),
UMVUMVUMVU (10 - Zimbabwe).

First Half of Alphabet A to M - DAGMALAFJALL (12 - Iceland), EGGEBEKFIELD (11 - Germany),
LIMBILIMBLI (12 - Zambia)

Second Half of Alphabet N to Z - PROTOPOPOVO (11 - Russia ), TUTUNSUPUR (10 - Indonesia)

Odd letters of the alphabet - AKAMAKAMAKA (11), WASSAMASSAW (11), MESSESSEGE (10
-Mozambique), KIWIWIWI and MIMICIMICS (both Web2) and WIKIKWI (Hodge) all with 9 letters,
COOSCOOSOOS (11), MUKUSUKUSU (10 - DR Congo). Note that in 3 of these words the Vs and
Cs alternate.