

LOOPING, GROUPING AND ALIGNING THE VOWELS

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Firstly, a reminder that an AEIOU word is one in which the 5 major vowels occur just once, in any order. The AEIOU words of current concern, however, are limited to those in which the vowels occur in alphabetical circular order or reverse alphabetical circular order. Most of the examples below are solid words; a few hyphenated designations are included but phrases are not admitted. The listings in 'Looping the Vowels' and 'Grouping the Vowels' read across the page. Unreferenced words can be found in the Oxford English Dictionary, Second Edition, unless specified otherwise. The sources of other words are given at the end.

LOOPING THE VOWELS

Vowels in alphabetical circular order (5 patterns): starting at A in each case, and moving from left to right to the end of the word then looping back to the beginning of the word and continuing to move from left to right until U is reached, passes through the vowels in alphabetical order.

AEIOU CAESIOUS EIOUA VENTRICORNUAL IOUAE ISOBUTANE
OUAEI VOUCHSAFEING UAEIO UNATTENTION

Vowels in reverse alphabetical circular order (5 patterns): starting at U in each case, and repeating the same sequence of movements as above until A is reached, passes through the vowels in reverse alphabetical order.

UOIEA SUBCONTINENTAL AUOIE AUTHORIZE EAUOI PENNATULOID
IEAUO IERFAULCON OIEAU COINTREAU

GROUPING THE VOWELS

VOWELS IN ALPHABETICAL CIRCULAR ORDER

In CAESIOUS (above, with vowel pattern AEIOU) the vowels are arranged in two groups, hence CAESIOUS can be said to have the *vowel grouping* (VG) AE - IOU. A systematic grouping of the 5 vowels is, I believe, new to Word Ways. Altogether there are 16 VGs based on the vowel pattern AEIOU. Here, each is illustrated by a single word where possible.

A - E - I - O - U	ATENISODUS (nz)	A - E - I - OU	ANNELIDOUS	A - E - IO - U	ARTERIOSUS
A - EI - O - U	TAPEINOTUS (nz)	AE - I - O - U	CAESPITOSUS	A - EI - OU	MARVEILOUS
AE - I - OU		AE - IO - U	PRAEDIOLUM (cld)	A - E - IOU	ABSTEMIOUS
A - EIO - U	PAREIOPHUS(nz)	AEI - O - U	ÆILNODUS (wnh)	AE - IOU	AERIOUS
AEI - OU		A - EIOU	HAREIOUS	AEIO - U	GAEIOCHUS
AEIOU					

Similarly, there are 16 VGs based on each of the remaining 4 alphabetically-circular vowel patterns EIOUA, IOUAE, OUAEI and UAEIO. This makes a total of 80 (5 x 16) VGs based on the 5 alphabetically-circular vowel patterns. In the lists which follow, locations (by country) are asterisked*. In the order in which they appear, they are Jeikrodrua (Ghana), Eirouar (Mauritania), Leiouna (Chad), Teioualt (Algeria), Iouake (Ivory Coast), Fonualei (Tonga), Bourawei (East Timor), Ngouyaezi (Comoros), Cotu-Baei (Romania), Ouaebi (Algeria), Kouaeir (Algeria), Cumarebito (Venezuela), Pulgaemi-Bong (N.Korea), Juazeiro (Brazil), Juncaveio (Portugal) and Phulae-i-Lop (Pakistan).

E - I - O - U - A	<u>SEMIPOPULAR</u>	E - I - O - UA	<u>VENTRILOQUAL</u>	E - I - OU - A	<u>KERIVOULA</u>
E - IO - U - A	<u>HELIOFUGAL</u>	EI - O - U - A	<u>STEIROTUBA</u> (nz)	E - IO - UA	
EI - O - UA	<u>JEIKRODRUA</u> *	EI - OU - A	<u>GEIBROULA</u>	E - I - OUA	<u>PETIT-THOUARS</u>
E - IOU - A	<u>PERIOURA</u> (nz)	EIO - U - A	<u>LEIOLUMA</u> (nz)	EI - OUA	<u>EIROUAR</u> *
EIO - UA		E - IOUA	<u>TEMIOUA</u> (edncm)	EIOU - A	<u>LEIOUNA</u> *
EIOUA	<u>TEIOUALT</u> *				
I - O - U - A - E	<u>INOCULATE</u>	I - O - U - AE	<u>FILOPLUMAE</u>	I - O - UA - E	<u>INCONSTRUABLE</u>
I - OU - A - E	<u>DISCOURAGE</u>	IO - U - A - E	<u>BIOVULATE</u>	I - OU - AE	
IO - U - AE	<u>CRIOPUNGAE</u>	IO - UA - E	<u>LION-GUARDED</u>	I - O - UAE	<u>IROQUAES</u> (Hodge)
I - OUA - E	<u>BIVOUAKE</u>	IOU - A - E	<u>IOUCATTE</u>	IO - UAE	
IOU - AE		I - OUAE	<u>LINOUAE</u> (rog)	IOUA - E	<u>IOUAKE</u> *
IOUAE					
O - U - A - E - I	<u>FORTUNATELING</u>	O - U - A - EI	<u>BROMSULPHTHALEIN</u>	O - U - AE - I	<u>NOMURAELEMIS</u> (nz)
O - UA - E - I	<u>CONUALLESSIT</u>	OU - A - E - I	<u>OUTWANDERING</u>	O - UA - EI	<u>FONUALEI</u> *
OU - A - EI	<u>BOURAWEI</u> *	OU - AE - I	<u>NGOUYAEZI</u> *	O - U - AEI	<u>COTU-BAEI</u> *
O - UAE - I		OUA - E - I	<u>TROUADELLI</u>	OU - AEI	
OUA - EI	<u>OUATEIS</u> (ch)	O - UAEI	<u>CONUAEID</u>	O UAE - I	<u>OUAEBI</u> *
O UAEI	<u>KOUAEIR</u> *				
U - A - E - I - O	<u>CUMAREBITO</u> *	U - A - E - IO	<u>UNAGGRESSION</u> (w2)	U - A - EI - O	<u>MULATEIRO</u>
U - AE - I - O	<u>PULGAEMI-BONG</u> *	UA - E - I - O	<u>SQUAMELLIFORM</u> (w2)	U - AE - IO	
UA - E - IO	<u>QUATERNION</u>	UA - EI - O	<u>JUAZEIRO</u> *	U - A - EIO	<u>JUNCAVEIO</u> *
U - AEI - O	<u>PHULAE-I-LOP</u> *	UAE - I - O	<u>QUAESITOR</u>	UA - EIO	
UAE - IO	<u>QUAESTIO</u>	U - AEIO		UAEI - O	
UAEIO					

VOWELS IN REVERSE ALPHABETICAL CIRCULAR ORDER

Again there are 80 (5 x 16) VGs, this time based on the 5 reverse alphabetically-circular vowel patterns UOIEA, OIEAU, IEAUO, EAUOI and AUOIE. The locations* are Muodiella (Mozambique), Oiseanu (Romania), Oieranu (Solomon Is.), Boieau (Belgium), Cinetahuso (Turkey), Wildenauhof (Germany), Hietapuro (Finland), Pireaumont (Belgium), Krepsavuori (Russia), Enauolik (Canada), An-kuo-hsien (China) and Kafungoie (DR Congo).

U - O - I - E - A	<u>UNOCCIDENTAL</u> (w2)	U - O - I - EA	<u>SUBPOPLITEAL</u> (st)	U - O - IE - A	<u>UNORIENTAL</u>
U - OI - E - A	<u>FUSOIDELLA</u> (nz)	UO - I - E - A	<u>DUOLITERAL</u>	U - OI - EA	<u>PRUNOIDEA</u>
UO - I - EA	<u>QUOTIDEAN</u>	UO - IE - A	<u>MUODIELLA</u> *	U - O - IEA	
U - OIE - A	<u>PUNGOIELLA</u> (nz)	UOI - E - A		UO - IEA	
UOI - EA	<u>SUOIDEA</u> (gale)	U - OIEA		UOIE - A	
UOIEA					
O - I - E - A - U	<u>CONSIDERATUM</u>	O - I - E - AU	<u>ODIFFERAUNT</u> (daw)	O - I - EA - U	<u>CONTINEANTUR</u>
O - IE - A - U	<u>ORVIETANUS</u>	OI - E - A - U	<u>POICEPHALUS</u> (nz)	O - IE - AU	<u>MONIEFAULD</u>
OI - E - AU		OI - EA - U	<u>OISEANU</u> *	O - I - EAU	<u>MOLINEAUX</u>
O - IEA - U		OIE - A - U	<u>OIERANU</u> *	OI - EAU	<u>OISEAU</u>
OIE - AU	<u>MOIENAUNT</u>	O - IEAU	<u>CODIEAUM</u> (aig)	OIEA - U	
OIEAU	<u>BOIEAU</u> *				
I - E - A - U - O	<u>CINETAHUSO</u> *	I - E - A - UO		I - E - AU - O	<u>WILDENAUHOF</u> *
I - EA - U - O	<u>RIDGE-AND-FURROW</u>	IE - A - U - O	<u>HIETAPURO</u> *	I - EA - UO	
IE - A - UO		IE - AU - O	<u>IERFAULCON</u>	I - E - AUO	
I - EAU - O	<u>PIREAUMONT</u> *	IEA - U - O		IE - AUO	
IEA - UO		I - EAUO		IEAU - O	
IEAUO					

E - A - U - O - I	<u>ERABUTOXIN</u> (dor)	E - A - U - OI	<u>TENTACULOID</u>	E - A - UO - I	<u>KREPSAVOURI</u> *
E - AU - O - I	<u>THESAUROSIS</u>	EA - U - O - I	<u>REACCUSTOMING</u>	E - AU - OI	<u>EBAUCHOIR</u>
EA - U - OI	<u>PEANUT-OIL</u>	EA - UO - I		E - A - UOI	
E - AUO - I	<u>ENAUOLIK</u> *	EAU - O - I	<u>BEAUFORTI</u> (mamsp)	EA - UOI	<u>SEA-QUOITS</u>
EAU - OI	<u>HEAUTBOIS</u>	E - AUOI		EAUO - I	<u>DEAUORING?</u> (inferred from endeauoring)
EAUOI	<u>BEAUOIR</u>				
A - U - O - I - E	<u>ACCUSTOMIZE</u>	A - U - O - IE	<u>STATUTORIES</u>	A - U - OI - E	<u>BATULOIDES</u> (nz)
A - UO - I - E	<u>VACUOLIZE</u>	AU - O - I - E	<u>AUTOSITE</u>	A - UO - IE	<u>AN-KUO-HSIEN</u> *
AU - O - IE	<u>AUTOPSIES</u>	AU - OI - E	<u>DAUCOIDES</u>	A - U - OIE	<u>KAFUNGOIE</u> *
A - UOI - E	<u>DACQUOINTE</u> (ah)	AUO - I - E	<u>FAUORITE</u>	AU - OIE	<u>HAUTBOIES</u>
AUO - IE	<u>SAUORIE</u>	A - UOIE		AUOI - E	<u>PAUOISE</u>
AUOIE	<u>AUOIED</u>				

ALIGNING THE VOWELS

So far, the number of consonants preceding, interspersed with, or following a particular VG has not been important. However, in order to align the vowels, a process which involves more than one word, it becomes an important factor. Added to this, the words which combine to make a particular word set (below) must be of an equal length.

IDENTICAL VOWEL GROUPINGS

The simplest way of achieving an alignment of like vowels requires the words to have *a common VG located in the same position in all the words*. It follows that consonants occupy the same positions in each of the words. When the words are written underneath each other, **vertical lines** of like vowels appear.

C A M E L I O U N	B O I L E A U (edfc)
C A M E L I O U S	B O I N E A U (Haiti)
F A C E T I O U S	B O I T E A U (Jersey)
H A B E R I O U N	D O I C E A U (Belgium)
M A N E R I O U S	L O I S E A U (a surname)
M A T E R I O U S	M O I N E A U
P A F E L I O U N	N O I R E A U (France)
P A R E C I O U S (ch)	N O I S E A U (France)
	P O I R E A U
	Z O I Z E A U (Haiti)

But that is too easy! Suppose, instead, the like vowels are required to appear in **diagonal lines** running from north-west to south-east. To achieve this, *the common VG must be sited one letter place to the right in succeeding words*. These two words thus utilize A - EI - OU, one of the 16 VGs of the vowel pattern AEIOU.

a-ei-ou A C L E I S T O U S (w2)
 C A S T E I L L O U (France)

The following VGs represent 8 of the remaining 9 alphabetical/reverse alphabetical circular vowel patterns (all except IEAUO). Note: in the first word set the 5 vowels occur as an unbroken group; in the second word set the two words are near antonyms.

eioua	T E I O U A L T (Algeria)	i-ou-a-e	I N C O U R A G E S
	F R E I O U A T (Mauritania)		D I S C O U R A G E
ou-a-e-i	O U T C A P E R I N G	ua-e-i-o	G U A C D N E J I T O S (Dom.R)
	B O U K H A N E F I S (Algeria)		S H U A N C H E N I Z O (China)
u-o-ie-a	U N O R I E N T A L	oi-eau	O I S E A U X
	H U R O N I E L L A (nz)		P O I R E A U (Belgium)

e-a-u-o-i M E G A L U R O T H R I P S (nz) au-o-ie F A U L C O N N I E R
S H E L A P U T O V S K I Y (Russia) C R A U N R O C H I E

Theoretically, the longer the word, and the more condensed the VG and the nearer it is to the beginning of the word, the greater the number of words which can be added. Such words, ending in a run of consonants, don't appear to exist. My largest sets consist of three words.

au-o-i-e A U R O M I T E N S au-o-ie A U M O N I E R S
C A U P O N I S E D F A U B O N I E S
S T A U R O L I T E G L A U M O R I E

These two particular sets of words are definitive examples of their kind because neither will accept another word having the same VG. This is because the first word begins with a vowel and the last word ends with a vowel. Adding a word at the beginning, or at the end, of either word set requires VGs which begin with U, or E, respectively. All of which leads on nicely to the next challenge.

MIXED VOWEL GROUPINGS

By allowing *more than one* of the 5 alphabetical/reverse alphabetical circular vowel patterns to form the basis of the VGs, larger sets of words are achievable. In this context, the reverse alphabetical VGs are less productive than the alphabetical VGs, so let us take a look at them first.

Reverse alphabetical circular vowel groupings

2 different VGs

i-e-a-u-o C I N E T A H U S O (Turkey)
o-i-e-a-u O R I L E M A K U N (Nigeria)

3 different VGs

o-i-e-au P O S S I N G E R A U (Germany)
u-o-i-e-a U R O S K I N N E R A (dfpf)
au-o-i-e A U T O C L I P S E S
au-o-i-e H A U D O N V I L L E (France)

Alphabetical circular vowel groupings

2 different VGs

e-i-ou-a	T E L I N O U G A R (Chad)	oua-e-i	O U A N E Z I D (Morocco)
e-i-ou-a	D J E N I M O U T A (Guinea)	oua-e-i	K O U A P E L I (Cen. Afr. Rep)
a-e-i-ou	A N N E L I D O U S	i-oua-e	I Z O U A T E N (Morocco)
a-e-i-ou	J A M B E L I G O U (CA Rep)	i-oua-e	B I V O U A K E

3 different VGs

i-oua-e	I S O U A N E (Algeria)	ioua-e	T I O U A D E L (Morocco)
ei-oua	E I R O U A R (Mauritania)	ioua-e	J D I O U A T E (Morocco)
ei-oua	M E I D O U A (Mauritania)	e-ioua	E G J I O U A N (Niger)
a-ei-ou	A B E I N O U (Morocco)	e-ioua	R E C H I O U A (Morocco)
		a-e-iou	A R E D H I O U (Cyprus)

4 different VGs

This set of 7 words embodies VGs based on 4 of the 5 alphabetically circular vowel patterns (all except UAEIO); it is just two words short of being a square!

o-u-a-e-i O R U M A G E G I (Nigeria)
io-u-a-e I O D U R A T E D
io-u-a-e B I O V U L A T E
e-io-u-a E R I O N U R A S (nz)
e-io-u-a L E P I O T U L A (nz)
a-e-io-u A G E N I O S U S (nz)
a-e-io-u S A V E C I O N U (Lithuania)

SOURCES OF NON-OED WORDS

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Locations are taken from The United States Board on Geographic Names.