# AEIOU: SUPERVOCALICS IN WEBSTER'S THIRD 

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FOUNDING FATHERS and WOMEN SUFFRAGISTS, get out your FOUNTAIN PENS--it's time for another visit to the world of AEIOU. To do justice to my fascination with all things AEIOU, I recently introduced the term SUPERVOCALIC to refer to any item, be it word, phrase or proper noun, containing each of the five vowels once and only once, and no Y. The term is modeled on the existing word 'univocalic' which describes a word or phrase that contains only one vowel (potentially repeated, as in 'Mississippi' or Ellen DeGeneres'). It has the added appeal of being self-referential, that is to say 'supervocalic' is itself supervocalic.

Previous investigations have generally allowed the ever-chimeric Y into their midst, though in the current exercise, AEIOUY words have been left for separate consideration. (Susan Thorpe discusses these in the August Word Ways.) In previous AEIOU investigations it was often possible to replace a word containing Y with a comparable AEIOU-only word, so it seemed preferable to maintain the 'purity' of the current exercise. The term EURYVOCALIC is proposed for words and phrases containing AEIOUY once and only once, in any order. The prefix EURY-, meaning 'wide" (as in 'Europe'), is certainly appropriate for words with such a wide array of vowels, and affords us another self-referential term.

I've broken down the supervocalic space into four categories:

- Untainted Words: solidly-written dictionary-sanctioned entries, which have been the focus of many previous Word Ways investigations
- Multiword Phrases: hyphenated and otherwise 'tainted' items
- Popular Items: generally-known supervocalic people, places and things
- Fun Coinages: sometime cute, sometimes contrived items not covered by other categories

Our last episode, in the May Word Ways, incorporated a mix of all these specimens into a story comprised solely of 120 supervocalic elements, one for each ordering, following on the heels of a previous effort in Dutch.

This installment will describe the results of a search for supervocalic entries in Webster's Third Unabridged and its addendum. In so doing, we follow in the footsteps of the August 1999 Word Ways article by Susan Thorpe, which was the culmination of 30 years of previous work. In it, she completed a challenge first laid out in 1970 by Ross Eckler, with help from Dmitri Borgmann and Darryl Francis. That challenge was to find a solid uncapitalized English word for each of the 120 orderings. Using various dictionaries, the trio initially filled 104 of the 120 slots. Over subsequent years, more slots were filled.

The question arose: how complete a list could one make using only one reference source? In May 1979, David Shulman performed such an exercise on the Funk \& Wagnalls dictionary, filling more than half the slots. Susan completed the task with the Oxford English Dictionary, using headwords where possible and including citations and variant forms where necessary. This was indeed quite a feat, and with any divine providence her middle name should contain only an I, allowing her to claim supervocalic status!

Being a good stateside patriot, I decided to see how many slots could be filled by various supervocalic entries in Webster's Third. Note that this exercise includes slightly different constraints than previous ones, since as mentioned Y's are eschewed, and "tainted" (i.e., capitalized, hyphenated, or multi-word) entries are included where needed. This offsets the fact that Webster's Third, unlike the OED, does not provide a historical record of variant forms and archaic spellings from the vowel-friendly days of yore when I's were used for J's and U's for V's. Though I was doubtful whether Webster's Third would in fact contain a supervocalic entry for each of the 120 orderings, more slots were filled than I had originally guessed.

## Results

A manual search of Webster's Third was performed, cross-checked by a computer search of some related wordlists. Overall, 810 solid uncapitalized words were found, accompanied by 83 solid capitalized (or 'usually capitalized') words, 20 'near misses' (defined below), 309 multi-word phrases, and 18 words in definitions, derivations or constitutent words of other main entries, for a total of 1240 supervocalic items in Webster's Third. Due to the lack of a full computerized Webster's Third wordlist, some items may have been missed. The ordering OUAIE was the most fertile, yielding 74 items (all untainted), while 18 slots afforded only one untainted word. Due to the presence of XIPHOPHAGUSES and ZINJANTHROPUSES, an untainted word could be found starting with every letter of the alphabet (except, of course, Y).

The overall list included many curious and notable solidly-written entries, including some gems not listed in previous articles. A random smattering includes ECHINOCACTUS, FAUNIZONE, LITHOGRAVURE (photoengraving on stone), MACRONUTRIENTS (lack of which may leave one MALNOURISHED), OCTUPLICATE (though not 'nonuplicate'), MOUCHRABIEH (a Moorish balcony), MOULDIEWARP (a variant of 'moldwarp', a stupid or shiftless person, as well as a type of mole), OUTFANGTHIEF (the medieval right of a lord to try a felon living on his manor but caught outside it--and yes, there was also an 'infangthief'), OUTFIELDSMAN, and SPLANCHNOPLEURIC (an impressive 15 -letter specimen). The QUATTROCENTIST and the ULTRAMODERNIST might not agree on which century to study, but they can bond over their shared UAOEI vowel pattern. Two leg muscles, the GASTROCNEMIUS (calf) and the POPLITAEUS (hamstring) can claim supervocalic status. BILDUNGSROMANE is the plural of a type of novel, companion to the previously-noted ENTWICKLUNGSROMAN, the longest major-dictionary supvervocalic at 17 letters.

A variety of interesting multi-word phrases also turned up. Is NORMATIVE TRUTH or MORAL VIRTUE a SINE QUA NON on the PARISH HOUSE BULLETIN BOARD? Do the ARMENO-TURKISH and the TIBETO-BURMANS practice ONE-UPMANSHIP?

Supervocalics appear in other guises in Webster's Third, for instance as foreign words or archaic forms in derivations of other words (e.g., the Latin CONJUBILARE, the French CONNAISSEUR, and FIEULAMORT, an obsolete variant in the derivation of 'philamot'). They appear as constitutent parts of main entries (e.g. 'AUTREFOIS convict'), and as combining forms (e.g. RETICULATO-). One supervocalic was found only in the definition of another, with no main entry: CUPOLALIKE, in the definition of CLOISTER VAULT. These were found serendipitously, no systematic search through derivations or definitions was performed.

Occasionally, common sense dictated the inclusion of certain 'near misses'--derived word forms not explicitly listed in Webster's Third, but clearly analogous to related words which were listed. For instance 'chairman', 'chairperson' and 'subchairman' are listed, but not the supervocalic SUBCHAIRPERSON. Only in such obvious cases was it necessary to nudge the venerable Webster's Third in a supervocalic direction.

Once the overall collection had been amassed, two lists were created, and are presented below:

- Webster's Third: Best Entry attempts to present the 'highest-quality' supervocalic item found for each AEIOU ordering, using untainted words where available, then 'near misses', capitalized solid words, and finally multi-word phrases where necessary
- Webster's Third: Best of the Rest features the best 'tainted' item not used in the Best Entry list, where available.

Thorpe had already presented a List A reflecting Eckler et al.'s original multi-source lists, plus its accumulated additions and minor modifications, and a List B derived competely from the OED. In the two lists presented here, an attempt was made not to repeat words presented in these two lists or in prior articles. Repetition was unavoidable in cases where a small number of items was found. Where a choice was available, words were chosen which reflected either an elegant simplicity (e.g. BUSINESSWOMAN, BOATBUILDER), or exoticness of construction (e.g. SPHENOTURBINAL, CIRRONEBULA).

In the Best Entry list, it was possible to fill 98 of the 120 slots with untainted words (one from the Addendum), 5 slots of 'near misses' and 6 more slots with solid capitalized words, for a total of 109 slots filled by a solid entry. Of the remaining 11 slots, 8 could be filled by a multi-word phrase, bringing to 117 the total number of AEIOU orderings which have some form of entry in Webster's Third or a plausible near miss. However, the three remaining slots could not be filled by any form of Webster's Third entry.

## Supervocalic Items in Webster's Third

Untainted Words (solid, uncapitalized) 98 entries

|  | Best Entry | Best of the Rest | Eckler-Thorpe A | Thorpe B |
| :---: | :---: | :---: | :---: | :---: |
| aeiou | abstentious | watering trough | facetious 7 | caesious |
| aeoiu | cafetorium | Parthenocissus | pandemonium 7 | archesporium |
| aeoui | barrelhousing | ArmenoTurkish | haemofuscin 2 | warehousing |

aeuoi aeluroid aeiou aieuo aioeu aioue aiueo aiuoe
aoeiu aoeui aoieu aoiue aouei aouie auieo aueoi auioe auoei
auoie eaiou eaoiu eaoui
eauio
eauoi eiaou eiauo eioau eioua
eiuao
eiuoa
eoaiu
eoaui
eoiau
eoiua
eouai
eouia
euaio
euaoi
euiao
euioa
euoai
euoia flammiferous antineutron* carillonneur* jailhouse antinucleon*
lacinulose
amortisseur* ${ }^{*}$
alloimmune a macronuclei malnourished carburetion aureoling hallucinogen autotheism
autopsies
gregarious benzalkonium
englamouring
precaution ébauchoir meliphagous semiauto* echinocactus semiglobular
gesticulator* gerrhosaurid* neostriatum* retrolingual reformulating
neuralgiform
rheumatoid
pseudimago
delusional
edulcorating reductorial
gastrocnemius
splanchnopleuric
entwicklungsroman streptobacillus sphenoturbinal
war neurosis passive noun
radio spectrum main course cadmium lemon platinum blonde

Aplocheilus all-vowel-using\# gasoline pump (flute) harmonique
absolute pitch Balfour pine gauge point au revoir vaulting horse
auto-rifle
speaking out
Cephalodiscus
beta globulin
sea unicom
peanut oil
screwing around
Episcopal Church
eight-hour law
ventricular fold
premium loan
petrosal sinus
Stegosauri
Veronicastrum
precommissural\#
Reform Judaism
pre-Columbian
Venus's chariot
regulator pin
sled cultivator
red tulip oak
pseudo acid
Eudoxian
aneuploid 3
ambidextrous 7
archineuron 2
carillonneur 7
grandiloquent 7
antinucleon 3
radiculose 3
apothecium 7
allotelluric 2
amortisseur 3
laryngofissure 2
accoutering 7
tambourine 7
aculeiform 3
Aureomycin 3
cauliflower 7
autosexing 7
authorize 7
behaviour 7
crematorium 7
reavouching 2
exhaustion 7
tentaculoid 3
pedimanous 3
semiauto 3
plesiosaur 7
ventriloqual 5
gesticulatory 7
semicupola 2
endocardium 7
seroalbumin 2
neostriatum 3
dentolingual 5
encouraging 7
dentosurgical 5
education 7
euharmonic 3
repudiator 7
equivocal 7
neuropathic 7
sequoia 7
aequorin aireous
antineutrons raisonneur graciousness
adinuencyons
ramiculose
macrotherium
manoeuvring
agonieux
acrostique
assouerit
savouriness
haugersion
aureolin
cautioned
tautomerism
vacuolized
mendacious
metapodium
enamouring
reassumption
pennatuloid
epiphanous
peliagudo
periostracum
heliofugal
recirculatory
ventriculography
neopallium
menopausic
excoriatus
precommissural
depopulating
precommunicant equation
eukaryotic
elucidator
equimolar
eustomachic
neurotically

| iaeou | triadelphous | nitrate group | intravenous 7 | filamentous |
| :--- | :--- | :--- | :--- | :--- |
| iaoue | chivalrousness | Midas touches | miaoued 5 | dialogue |
| iauoe | disaccustomed* | giant sunflower | disaccustomed 7 | triantulope |
| ieaou | pithecanthropus | friend at court <br> ieoua <br> interosculant <br> ioaue <br> ignoramuses | Tibeto-Burman <br> glisson's capsule | intercolumnar 3 <br> violature 2 |
| ioeau <br> ioeua | hippocentaur <br> cirronebula | Inoceramus | intercommunal |  |
| iouae | bivouacked | nitrogen mustard | hippocentaur 3 | incommensurably 7 |


| ueioa | subregional | question mark | questionably 7 | unreciprocal |
| :--- | :--- | :--- | :--- | :--- |
| ueoai | superorganism <br> ueoia <br> suspensorial <br> undemocratic 7 | butterboat-bill <br> undercoating |  |  |
| uiaee | hurricanoes | fuerto Rican | unmethodical 7 | unrhetorical |
| uieao | quindecagon* | guinea fowl | multiramose 2 <br> quindecagon 5 | undiagnosed |
|  |  | multimegaton |  |  |

Near Misses 5 entries

| iaeuo | intraneuron\# |  | inaequo CLD | invaletudo |
| :---: | :---: | :---: | :---: | :---: |
| ieuao | miseducator\# | sine qua non | fieulamort 3 | dimensurator |
| oauei | opaqueing\# |  | opaqueing OED | contrauersi |
| oiaeu | poplitaeus\# | Codiaeum | poplitaeus 3 | omnigatherum |
| ueiao | guesstimator\# |  | pulverizator 3 | guesstimator |

Solid Words (Capitalized or Usually Capitalized) 6 entries

| ieoau | Dipterocarpus | finger of Saturn | diesophagus D | interrogatus |
| :--- | :--- | :--- | :--- | :--- |
| ieuoa | Dipneumonia | pricked up coat | interpulmonary 3 | irreuocably |
| oeiau | Oeciacus | comme il faut | Oeciacus 3 | obeiauns |
| oieau | cointreau | Oriental rug | moineau 2 | cointreau |
| uiaeo | Cuitlateco | Cuicateco | quinaseptol CDS | subitaneo |
| uioea | Lucioperca | cushion head | undiscoverably 3 | unicomeal |

Multi-Word Phrases 8 entries

| aeiuo | magnesium bomb |  |
| :--- | :--- | :--- |
| aeuio | trade-union | presumptio Lat |
| aueio | black guillemot |  |
| eaiuo | bleach liquor <br> ieauo | witches' cauldron |
| iuaeatitudo Lat |  |  |
| iuaeui | lingual bone | blockade-running | | circular note |
| :--- |
| cottage tulip |
| oaieu |
| cormative truth |


| cane-liquor 2 | aegritudo |
| :--- | :--- |
| maleruption 2 | flabergudgion |
| Marquisedom OED | alumineor |
| sea-liquor CD | beatitudo |
| printer-author OED | lerfaulcon |
| fistulatome 2 | linguaphone |
| pyrocatechuic 2 | longaueity |
| containerful BT | solacieus |

No Entry in Webster's Third 3 entries

| iaoeu |  | citharoedus 2 | cinnamomeus |
| :--- | :--- | :--- | :--- |
| iaueo | vichauncellor | diauchenos D | lillabullero |
| ioaeu | Hippocamelus | lithofracteur 2 | icosaedrum |

Vichauncellor is a Middle English word, listed in the derivation of "vice-chancellor." Hippocamelus is a genus in the derivation of "guemal"; alternatively, one can use innovateur, in the derivation of "innovator", or ditrochaeus (Latin), in the derivation of "ditrochee." This leaves iaoeu as the only slot with no listing of any quality in Webster's Third.

## Footnotes and Sources

* only untainted Webster's Third word found for its slot
a found only in Addendum of Webster's Third
\# 'near miss'
all-vowel-using: not really a near miss, but I figured it deserved to be in the list guesstimator: listed 'estimate', 'guesstimate' (vb), 'estimator'
intraneuron: listed 'interneuron'
miseducator: listed 'educator', 'miseducated', 'miseducation'
opaqueing: technically, 'e' not implied by Webster's Third notes
poplitaeus: listed 'popliteus', 'poplitaeal'
precommissural: listed 'postcommissure', 'postcommissural', 'precommissure' (Sheesh!)
six hundred and two: implied by the listing of other numbers
subchairperson: listed 'subchairman', 'chairperson' (in Addendum)
italics word listed only in a definition, derivation or citation (see under presumption, beatitude, connoisseur, Episcopal)

BT Bloomsbury Thesaurus
CLD Cassell's Latin Dictionary, 1948
CD(S) Century Dictionary (Supplement), 1889-91 (Supplement 1909)
D Dorland's Medical Dictionary
OED Oxford English Dictionary
TIG Times Index-Gazetteer
5 Webster's Collegiate Dictionary, 5th edition
7 Webster's Collegiate Dictionary, 7th edition
2 Webster's New International Unabridged Dictionary, 2nd edition
3 Webster's New International Unabridged Dictionary, 3rd edition

