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 super-vocalic 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, hyphen-ated, 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

		234		
aeuoi	aeluroid	war neurosis	aneuploid 3	aequorin
aeiou	flammiferous	passive noun	ambidextrous 7	aireous
aieuo	antineutron*		archineuron 2	antineutrons
aioeu	carillonneur*	radio spectrum	carillonneur 7	raisonneur
aioue	jailhouse	main course	grandiloquent 7	graciousness
aiueo	antinucleon*	cadmium lemon	antinucleon 3	adinuencyons
aiuoe	lacinulose	platinum blonde	radiculose 3	ramiculose
aoeiu	gastrocnemius	Aplocheilus	apothecium 7	macrotherium
aoeui	splanchnopleuric	all-vowel-using#	allotelluric 2	manoeuvring
aoieu	amortisseur*	gasoline pump	amortisseur 3	agonieux
aoiue	alloimmune a	(flute) harmonique	laryngofissure 2	acrostique
aouei	macronuclei	absolute pitch	accoutering 7	assouerit
aouie	malnourished	Balfour pine	tambourine 7	savouriness
auieo	carburetion	gauge point	aculeiform 3	haugersion
aueoi	aureoling	au revoir	Aureomycin 3	aureolin
auioe	hallucinogen	vaulting horse	cauliflower 7	cautioned
auoei	autotheism		autosexing 7	tautomerism
auoie	autopsies	auto-rifle	authorize 7	vacuolized
eaiou	gregarious	speaking out	behaviour 7	mendacious
eaoiu	benzalkonium	Cephalodiscus	crematorium 7	metapodium
eaoui	englamouring	beta globulin	reavouching 2	enamouring
eauio	precaution	sea unicom	exhaustion 7	reassumption
eauoi	ébauchoir	peanut oil	tentaculoid 3	pennatuloid
eiaou	meliphagous	screwing around	pedimanous 3	epiphanous
eiauo	semiauto*		semiauto 3	peliagudo
eioau	echinocactus	Episcopal Church	plesiosaur 7	periostracum
eioua	semiglobular	eight-hour law	ventriloqual 5	heliofugal
eiuao	gesticulator*	ventricular fold	gesticulatory 7	recirculatory
eiuoa	entwicklungsroman	premium loan	semicupola 2	ventriculography
eoaiu	streptobacillus	petrosal sinus	endocardium 7	neopallium
eoaui	gerrhosaurid*	Stegosauri	seroalbumin 2	menopausic
eoiau	neostriatum*	Veronicastrum	neostriatum 3	excoriatus
eoiua	retrolingual	precommissural#	dentolingual 5	precommissural
eouai	reformulating	Reform Judaism	encouraging 7	depopulating
eouia	sphenoturbinal	pre-Columbian	dentosurgical 5	precommunicant
euaio	neuralgiform	Venus's chariot	education 7	equation
euaoi	rheumatoid	regulator pin	euharmonic 3	eukaryotic
euiao	pseudimago	sled cultivator	repudiator 7	elucidator
euioa	delusional	red tulip oak	equivocal 7	equimolar
euoai	edulcorating	pseudo acid	neuropathic 7	eustomachic
euoia	reductorial	Eudoxian	sequoia 7	neurotically

		233		
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	tricephalous 3	dipetalous
ieoua	interosculant	Tibeto-Burman	intercolumnar 3	intercommunal
ioaue	ignoramuses	glisson's capsule	violature 2	microcapsule
ioeau	hippocentaur	Inoceramus	hippocentaur 3	microcephalus
ioeua	cirronebula	nitrogen mustard	incommensurably 7	inopercular
iouae	bivouacked	discount rate	discourage	incomputable
iouea	thiourea	Micoquean	isonuclear 3	micronuclear
iuaeo	linguaeform*	circular error	linguaeform 3	stipulaeform
iueao	instrumentator	six hundred and two#	vituperator 7	induperator
iueoa	milquetoast*	instrument board	Figueroa TIG	milquetoast
iuoae	disulfonate	Bildungsromane	insupportable 7	insupposable
iuoea	circumboreal	liquor head	immunotherapy 7	circumcomeal
oaeiu	osmaterium*	contrast medium	hypotrachelium 3	mycobacterium
oaiue	foraminule	mocha bisque	portraiture 7	ortanique
oauie	boatbuilder	Port-au-Prince	consanguine 7	oraculize
oeaiu	confessarius	show geranium	overpainful 2	cometarium
oeaui	somersaulting	pole vaulting	overhauling 7	overvaulting
oeiua	proventricular	proscenium arch	proventricular 3	conventicular
oeuai	contextualism	one-upmanship	conceptualism 3	coequality
oeuia	obsequia	Border Ruffian	obsequial 3	orteguina
oiaue	choriambuses	bronchial tube	foliature 5	consignature
oieua	ovicellular*	long-finned tuna	ovicellular	coniectural
oiuae	nonissuable	crop insurance	continuable 2	orbiculate
oiuea	solifugean*	continued bass	solifugean 3	constituentary
ouaei	thousandweight	mouth-watering	outcapering 2	outwandering
ouaie	boundaries	fountain pen	tourmaline 7	gourmandise
oueai	monumentalism	House Amish	housemaid 7	mousetail
oueia	congruential	lounge lizard	volumetrically 7	countercyclical
ouiae	octuplicate	founding fathers	communicate 7	occupiable
ouiea	outfieldsman	porcupine crab	bountihead 2	outlinear
uaeio	supraversion	sulfate ion	quaternion 7	unattention
uaeoi	muraenoid	square joint	quatrefoil 7	crustaceoid
uaieo	cuadrillero	subchairperson#	unpraiseworthy 2	guarnimento
uaioe	mustachioed	full-fashioned	ultraviolet 7	ungainsome
uaoei	quattrocentist	burn a hole in	ultramodernism 2	unatmospheric
uaoie	juxtaposited	Dumbartonshire	uvarovite 7	unaccomplished
ueaio	superpatriot	purple apricot	numeration 7	putrefaction
ueaoi	unreasoning*	blue parrot fish	unreasoning 7	unseasoning

ueioa	subregional	question mark	questionably 7	unreciprocal
ueoai	superorganism	butterboat-bill	undemocratic 7	undercoating
ueoia	suspensorial	Puerto Rican	unmethodical 7	unrhetorical
uiaoe	hurricanoes	fuchsia rose	multiramose 2	undiagnosed
uieao	quindecagon*	guinea fowl	quindecagon 5	multimegaton
uieoa uioae	businesswoman	pumice soap jumping-off place	unipersonal 2 unimportance 7	multipersonal undissolvable
uoaei	sulfonphthalein*	Jumping-off place	sulphophthaleins 2	burgomastership
uoaie	unsportsmanlike	cutthroat finches	unorganized 7	sulphocyanide
uoeai	subpoenaing	lug foresail	suboceanic 7	unoperating
uoeia	duodecimal	cup of elijah	uncongenial 7	uncommercial
uoiae	fluoridate	Bubonidae	subordinate 7	unsociable
uoiea	subcontinental*	Muroidea	unoriental 2	uncomplimentary

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		cane-liquor 2	aegritudo
aeuio	trade-union	presumptio Lat	maleruption 2	flabergudgion
aueio	black guillemot		Marquisedom OED	alumineor
eaiuo	bleach liquor	beatitudo Lat	sea-liquor CD	beatitudo
ieauo	witches' cauldron		printer-author OED	Ierfaulcon
iuaoe	lingual bone	circular note	fistulatome 2	linguaphone
oaeui	blockade-running	cottage tulip	pyrocatechuic 2	longaueity
oaieu	normative truth	connaisseur Fr	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