MORE BEGINNINGS AND ENDINGS

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In the November 1971 Word Ways, Darryl Francis presented a list of words and names, each as long as possible, beginning and ending with all possible letter-pairs. At the end of the article, he challenged Word Ways readers to draw up the corresponding list of the shortest possible words. Answering his challenge, I have constructed the list given below.

In order to make the two lists strictly comparable, I have used the rules enunciated in the earlier article to decide which words to exclude or include. Specifically, all unasterisked words in the list can be found as boldface entries in the main sections of Webster's Second and Third Editions. Hyphenated words (such as X-RAY, X-ING, X-MAN) have been excluded, as have all plurals not specifically given in boldface. Verb forms ending in -ING, -ED or -SHAVE have been similarly excluded.

In drawing up the short-word list, I soon discovered that further rules were needed. Single words in multi-word phrases (AU COURANT, OP ART) have been left out, as have apostrophized words (A'I, WI', XI'D). Prefixes and suffixes (BI-, -IC, -CY). Most important, any words in the main section of Webster's Third having the identifiers abbr or symbol have been removed from consideration (if these were included, almost all of the short-word list would consist of two-letter words). Plurals of single letters (BS, CS, etc.) have arbitrarily been excluded, but names of letters (FF, EF, ZED, ZEE) have been allowed. To avoid uninteresting examples, one-letter words are not allowed as words beginning and ending with the same letter. Many exclamations, interjections and substandard words (TCH, SH, BAH, AH, AW, EH, ST) have been allowed. Reformed spellings (listed below the line in Webster's Second) are heavily represented.

If no word beginning and ending with the necessary letters could be found in the main dictionaries, I used words (asterisked) from the biographical and gazetteer sections of Webster's Second. The same rule was used in the "Beginnings and Endings" article.
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This list contains 637 unasterisked words, the same as the long-
word list. However, the list of asterisked words has been increased
from 8 to 13 by adding a word found later by Darryl Francie (VI-
DOCQ) and by adding four words from an earlier gazetteer section
of Webster's than he had available (PANJ, RONCQ, WERVICQ,
ZENJ).

A considerable number of the unasterisked words, ranging from
3 to 12 letters in length, are found on both the long-word list and
the short-word list. However, it is not too surprising to find here both
the shortest words on the long-word list (RAJ, TAJ, YEZ, ZIW) and
the longest word on the short-word list (XEROPRINTING).

Chuj nastaliq weav yez
Funj Pontaqc xeriff zindiq
Iraq raj xeroprinting Zhdanov
Inez taj Xlcak Ziw
munj trinq xylanthrax verb Yugoslav

Readers may be amused by a couple of oddities in the two lists. The
words LAB and LABLAB are in corresponding positions on the short-
word list and the long-word list, as are the words QUALITATIV and
QUANTITATIV.

AA aa AB Ab AC ac AD ad AE ae AF alf AG agog AH ah AI ai
AJ Allganj* AK ak AL al AM am AN an AO Ao AP alp AR ar
AS as AT at AU aku AV Aa Av AW aw AX ax AY ay AZ az

BA ba BB bib BC bac BD bad BE be BF buf BG bag BH bah
BI bali BJ benj BK bak BL bal BM bam BN ban BO bo
BP bop BR bar BS bus BT but BU bu BV bonav BW bow
BX box BY by BZ buz

CA cha CB cab CC chlc CD cod CE ce CF cof CG cog CH cach
CI chl CJ Chuj CK cork CL col CM cam CN can CO co
CP cap CQ coq CR car CS cos CT cat CU cru CV chiv
CW cow CX cox CY coy CZ coz

DA da DB dab DC doc DD dud DE de DF def DG dog DH dah
DI dl DK dak DL dal DM dam DN din DO do DP dlp DR dar
DS das DT dot DU du DV dev DW dew DX dux DY day
DZ Daez

EA ea EB eb EC eplic ED ed EE ee EF ef EG eg EH eh EI Ei
EK elk EL el EM em EM em EN en EO ego EP equip ER er ES es
ET et EU eu EV evru EW ew EX ex EY ey EZ ersatz
QUERY

What is the shortest word that has a unique pattern? The answer can easily be found using Jack Levine's "A List of Pattern Words of Lengths Two Through Nine". After eliminating several errors, the shortest unique pattern words appear to be ESSEE, LLAMA, REREE and OOLLY. (Note that LLUDD does not qualify, because AALIL matches it.) If one does not allow below-the-line entries from Webster's Second, the shortest unique pattern word is IIWI, if EESE is below the line, and EEFE and EELE cannot be located. If one is restricted to Webster's Pocket Dictionary, the shortest word is EEL.

What is the longest word that does not have a unique pattern? More stringently, what is the longest word having an isomorph in which none of the letters in corresponding positions are the same? It is conjectured there are isomorphic pairs of more than sixteen letters, unless one is restricted to a small dictionary.