Mexico, 49th, New York.

This partial list of words that Inspector Lestrade brought around this morning from Boothwyn looks like pure gibberish to me, Holmes. It contains many words I've never heard of, there's no order to it, and there seems to be no rhyme or reason to it. Let's throw it away and be off for the concert.

Possibly true, Watson, but not quite so fast. Although it would appear to be meaningless at first, it could contain a most cleverly disguised message of some sort, perhaps some cryptic clues concerning our good friend, the King of Boothwynia. Let us put our brains to the task and see what develops. Did you happen to take notice of the total number of lines in the message?

Yes, there were exactly 26 lines.

And does that number suggest anything specific to you, Watson?

The date? No, 'tis the 3rd of the month. The number of shopping days till Christmas? No, this is only May. Ah ha! I have it. It's the number of letters in the English alphabet.

Very good indeed, Watson. So let us assume that each line is now associated with one of the 26 letters in the alphabet. What next? You may have noted that many of the initial letters are repeated.

Yes, Holmes, I believe there are eight A's, in fact.

Then we must look elsewhere. Did you notice anything odd about any of the other letters in these words?

Well, yes. The last letters in each line do appear to be quite different: S, D, Y, F, down to the O and X.

Have you noted that O and X somewhere else, Watson?

Yes, by Jove, as final letters of the first words in the first two lines. In fact, the final words in the first column end with D and S, just like the beginning words in the second column.

Very observant, my good man. Now suppose you completed the sequence of final letters in the second column by filling in the blanks from the final letters appearing in the first column, reading upwards.

Well, let's see. I would get: S.DGYF.BLAN..IMPCRWTH.OX.
And which letters of the alphabet were unused?

The letters E, J, K, Q, U, V and Z were not used.

Do you notice any partial words in that sequence, Watson?

BLAND or BLANK, and of course my old favorite cross-word puzzle word CRAWTH, and maybe BOX or FOX.

Try placing only the seven unused letters in the seven blanks. Could you then make a few, albeit rare, words from this sequence?

QU must go together and QUIMP is not a word, but, by George, SQUIDY is, and then there are FEZ, BLANK, JIMP, CRAWTH and VOX to complete the sequence. That's wonderful, Holmes, I've, er ah, we've constructed the original sequence, and our job is finished.

Not quite yet, Watson. Don't you feel that these words are not all common words, and that they must have a specific purpose here? And perhaps we can fill in a few that may have been omitted.

I suppose they might have a specific purpose, but how could we possibly tell from the thousands and thousands of words in the English language, just which ones should fit in the empty spaces, even if we now assume that we know the final letters of all the words in both columns?

First let us observe a few of these words with a little more analysis. For instance, Watson, do the 14th and 15th words suggest any other words to your mind?

Well, yes, Holmes, they do. AVIGATION looks like NAVIGATION and CARINA looks like OCARINA.

Yes, and perhaps ZOOSPORIFEROUS for the last -- the 26th word, eh Watson? Hmmm, Z for the 26th word, and an N and an O for the 14th and 15th words, and...

Holmes, I think I've got it! N is the 14th letter of the alphabet and could go in front of the 14th word to form another word. Maybe each of the 26 letters could be placed in front of the words on our list to form other words.

Very clever, Watson. You know my methods. ATRIPLEX and BABONGO would be the first words, and YGAPO and ZAX the last ones.

Well, Holmes, I guess that about wraps it up, eh?

Almost, but not quite. I still have a nagging feeling that we haven't quite completed it yet.

Well, being a doctor, I would have used much simpler words like PILL with ILL instead of such a long word as PHYLARCHICAL.
Watson, you've done it again. The diabolical fiend who devised this fiendish list used the longest word possible in each case, except...

Yes, that must be it.

Except what, Holmes? Many of these words look to be of an extremely long length to me.

Indeed they are. I just happen to have in my possession an advance copy (a very advance copy) of Webster's International Dictionary, Second Edition. I naturally have retained quite a few of its words in my memory, and I recall that most of the words on this list are words from this dictionary. Yes, Watson, the game is now afoot.

But what do the blanks and question marks mean?

In selecting nearly 40 words to fill these two lists, it is mathematically highly probable that, in some instances, there would not be just one longest word, but rather two or more words of the same length, and this explains the blanks. For instance, our arch-fiend could have used EMIGRATIONIST or ESTABLISHMENT for the E--T word, ENAMELING or ESTERLING for the E--G word, HAMACRATIC or HUPAITHRIC for the H--C word, MAGNIFICATION or MAMMONIZATION for the M--N word, and MARK or MASK for the M--K word. Also some of the empty spots can now be filled in with CHOU (or CLOU, a foreign word), NARK or NOCK, PAGRI, SEXARTICULATE, or UVALLEY. Possibly the word TREASONPROOF could replace TREF, RATTRAP replace RAMP, FARROW would be as good as FALLOW, and GRIFF as good as GRUFF.

But of course, how deucedly simple. It seems so perfectly clear and obvious now, Holmes.

Elementary, was it not, Watson? Now if we hurry, we just have time to catch the last half of our concert.

Ahem! Strange, Holmes, but the smoke from your pipe is forming a large question mark over your head. Why the brown study?

At today's concert, during Variations on the Theme, I suddenly thought of our most trying case: The Case of the False Presumption. Moriarty nearly had us then, didn't he?

Come now, Holmes. Had us? Utter rot!

But if you had not considered a hypothesis must be tested both pro and con, we might have been done in.

Why, er, yes I did stumble onto that possibility.

Then why not now, Watson? In my rush to get to the concert, I missed an important point of the Boothwyn Epistle. Remember I pre-
sumed the blanks must refer to an indecision? Yet note carefully. Of the six words needed for the three blanks, I did indeed mention five having dual possibilities. Yet what of the sixth? I recall HABILITATE from my advance copy. It ought to have a mate. But my memory of H--E words cannot match it with another. Thus we must go with the longest, which, clearly, is HISTIOPHORIDAE. This word, which appears below the line, mentions the related ISTIOPHORIDAE, but misspells it by dropping the third I.

But what has all this got to do with pro or con? Dash it all, I don't fathom the reasoning.

Simple, my dear Watson. Earlier I mentioned four examples of ties outside the blank words. There's the con that invalidates the whole supposition. Ties abound throughout the list and are not restricted to the blanks.

Then, Holmes, we are as much in the dark as ever.

No, Watson, the epistle is solved. Our diabolical author used references that go even beyond Webster's Second into the distant future. While you were napping I checked for the word AMB given in the cryptic list we received and the necessary LOMENTA to jibe with OMENTA. Neither is in my copy of the dictionary.

Then you erred, my dear Holmes.

No, indeed. Recall I said that most of the words were in this dictionary. In matter of fact, I'll wager that someday a word QUM will appear in a reference to be called The Random House Dictionary under the entry QARA QUM to fill in the Q--M word.

Astounding. But, then, what was the point of the blanks?

Elementary, my dear Watson. Firstly, to confuse and confound us by reducing the pattern depth. Secondly, to aid and assist us with a hidden clue.

Of course. Er ahh ... what clue?

You yourself pointed it out. A key letter to fill in the blanks for the final letters was the letter K to spell BLANK; and this occurs in a blank in the list of words.

Why yes, Holmes. Glad I was of so much help. Guess we've done it again, by Jove.

Except for one final point -- the real message so frustratingly disguised. The King of Boothwynia is clearly in real danger. We trust he may keep his head and not become a Beheadment. Hurry, Watson, we must warn him forthwith of the dastardly plan impending.
The pre-concert dialogue in this Sherlock Holmes parody was written by John Ferguson of Silver Spring, Maryland, as an entry for Ralph Beaman's Logology Cash Contest announced in the May 1973 Word Ways. The post-concert dialogue was added by Ralph Beaman to clear up a few overlooked or misunderstood points. The judges had no difficulty in deciding that this parody should receive the $5 prize for the "most amusing or most ingenious entry".

James Rambo of San Francisco, California, sent in a much brief-er humorous essay. In response to Questions 1, 2, and 3 (see the May issue), he replied "of course it is"; in response to Question 4, he replied "good riddance!"; in response to Question 6, he replied "any of the question marks referred to in Question 5 may be replaced by the word 'best' -- thus it becomes needless to respond to this question".

Four readers -- Darryl Francis of Hounslow, England, Mary Youngquist of Rochester, New York, Ernst Theimer of Rumson, New Jersey, and Murray Pearce of Bismarck, North Dakota -- competed for the grand prize of $25. As all of these entries were meritorious, it was not an easy task for the judges to select a winner. Their task was made more difficult by the fact that Ralph Beaman had set down no guidelines for judging. Should words from other dictionaries be allowed to count as heavily as words from Webster's Second or Third? Should inferred entries (plurals, past tenses, gerunds), usually but not always given in lightface type, be admitted on the same basis as boldface entries? Should words from multi-word entries be allowed? What about capitalized words? Or abbreviations? Or combining forms (such as INTRA-)? Should one score contestants solely by the number of words they discovered to fill in blanks or question marks, or should one give credit proportional to the length of the word that was found? The judges decided to allow all word variants listed above with the exception of abbreviations. They scored entries by counting up the total number of letters in all words replacing blanks or question marks; to this they added the number of additional letters achieved by replacing words in Ralph Beaman's list (for example, RESTAMP has three more letters than RAMP). Using this criterion, the winner of the $25 was Murray Pearce with 116 points, topping Darryl Francis's 104 and Mary Youngquist's 94. Fortunately, this decision did not seem to be affected by changing to a number-of-words criterion, or by imposing various combinations of the other restrictions mentioned above.

It should be emphasized that not only the judges but the contestants were somewhat bothered by the lack of rules concerning allowable words. Most attempted to infer the rules by observing the words already in the list. Darryl Francis correctly deduced that Ralph Beaman used the eight-volume Air Force Normal and Reverse English Word List (based on several dictionaries, primarily Webster's Second) as his source, but failed to note that one word on the list, LOMENTA, is in neither Webster's Second nor Third. Murray Pearce suggested replacing this with LARALIA which (with its beheadment) does appear in Webster's Second. Murray concluded that combining forms were
acceptable since AMB- appears in Webster's Second as a combining form. Ernst Theimer was the only one to comment specifically on the existence of capitalized words in the original list; however, no one hesitated to use capitalized words (such as INEZ) in their enlarged lists.

Nearly everyone was confused by the distinction between blanks and question marks. As already noted, John Ferguson thought that blanks identified situations in which two or more words tied for the honor of being the longest beheadable word. Darryl Francis thought that (Blank) characterized those entries in the list that could be filled by a pair of beheadable words, whereas ?...? characterized those entries that could be filled by only one (or by no) beheadable word. In fact, Ralph Beaman created the blanks by deleting six words in his list to make the pangrammatic pattern of word-endings harder to detect; thus, entries with a blank should have been somewhat easier to fill in than entries with a question mark.

Although Ernst Theimer recognized that the 26 letters of the alphabet were used once each as word-terminations, he failed to detect the SQUADGY FEZ BLANK JIMP CRWTH VOX pattern. However, he came up with an entirely new question to investigate: what arrangement of final letters enables one to find beheadable words for all 26 initial letters? He failed to find a complete list because he was unable to find any beheadable words ending in Q.

For the record, we summarize all improvements that can be made on Ralph Beaman's original list, together with the initials of the discoverers. All words are in Webster's Second unless otherwise noted. First, consider replacement words:

RAMP by RESTAMP (MP, DF) or RATTRAP (JF)
TREF by TREASONPROOF (JF)
VENDING by VINDICATING (DF, MY, MP), an inferred entry

Next, consider filling in the blanks:

ESTABLISHMENT (MY, DF, JF, MP, RB)
EDOCTRINATING (MP), an inferred entry; ENAMELING (JF, RB) or ESTERLING (MP, JF) are in boldface
HAMACRATIC (JF) or HUPAITHRIC (JF); RB suggested HATTIC
HISTIOPHORIDAE (RB), misspelled in Web II, corrected in Web III
MAGNIFICATION (RB, DF, JF, MY, MP)
MASK (RB, DF, JF) or MARK (MY, JF) or MINK (MP, ET)

Finally, question marks can be replaced by:

CLEAV (DF, MP), leav in Funk & Wagnalls
CHOU (MP, JF) or CLOU (JF)
NARK (DF, JF, MY, MP)
SEXARTICULATE (JF)
PAGRI (JF, MP)
QUERY

Philip Cohen of Aliquippa, Penna. recently observed that the series of dashes and dots representing a word in International Morse Code can be highly ambiguous if the spaces between the separate letters are omitted; for example, SEE, IS and HE are all represented by a sequence of five dots. What is the longest series of dots and dashes that can be decoded into two different words (called isomorses)?