Readers are encouraged to send their own favorite linguistic kickshaws to the "Kickshaws" Editor.

Except for the very difficult "challenge problems" all answers to questions posed in this feature appear on pages 191-192.

**Autantonyms**

In the previous issue I cited the words "cleave" and "let" as self-contradictory words, capable of being applied with opposite meanings. Joseph T. Shipley has obviously explored this curious feature in much greater depth than I have and presents a formidable list of what he calls "autantonyms" in his delightful book *Playing With Words*, Cornerstone Library, 1966:

- **fast**: a fast horse runs; a fast color doesn’t.
- **dust**: remove same from a suit; add same to a field of crops.
- **trim**: embellish a Christmas tree; disembellish a fat cut of meat.
- **trip**: move nimbly; stumble.
- **mortal**: death-dealing; death-prone.
- **weather**: wear well; wear out.
- **overlook**: inspect; neglect.
- **cavalier**: gallant and gentlemanly; haughty and ungentlemanly.

Shipley has other examples, among which I particularly like "to think better of." Applied to your neighbor it means to admire him more; applied to the plan he proposed it means to like it less.

**A College of Interesting Cardinals**

The words NI, SAN, TP, FOUR, VIER, and CINCO, meaning respectively: 2 and 3 in Japanese, 3 in Russian, 4 in English and German, and 5 in Spanish, have the interesting property that they denote the number of letters in their wordforms. Since the Chinese alphabet is ideographic, rather than phonetic, the Chinese character denoting "one" is also of this type. Thus our list extends from one to five. However, it can also be shown that no larger (or should I say longer?) cardinals
of this type exist in any of the languages mentioned. Therefore any polyglots among our readers are encouraged to extend the list. Dead languages are permitted, though Latin will be found of no help. It does come close, however, with “quattuordecem”—14. All this reminds me for some reason of a really unrelated topic, known as

The Printer’s Paradox

A printer has a block of 100 spaces, each of which can be filled with any of 27 different type symbols: the 26 letters of the alphabet (upper case) and a null for spacing purposes. The number of intelligible messages that can be printed under these restrictions is staggeringly large, but obviously finite, since the number of ways of filling 100 spaces with any of 27 symbols is the 100th power of 27.

Among these messages there are some which characterize or define positive integers, sometimes in any of several ways. For instance 7 is characterized by SEVEN, FIVE PLUS TWO, THE SQUARE ROOT OF FORTY NINE, THE NUMBER OF DAYS IN A WEEK, and many other ways the reader can think of. Most of the possible “messages” are nonsense. Most of those that are not do not refer to integers. It follows, of course, that the number of integers that can be characterized in no more than 100 spaces is also finite, and that being true, there must be a largest one. Think about that largest integer for a moment. It will be very large, indeed, certainly larger than the 100th power of 27, since there will be many integers less than that number which are incapable of characterization. Call the largest characterizable integer M. Now consider the message:

ONE MORE THAN THE LARGEST NUMBER THAT CAN BE CHARACTERIZED IN ONE HUNDRED SPACES OR FEWER

That message characterizes M+1, requiring only 89 spaces. We are left with the contradiction that M is the largest characterizable integer, but that M+1 is also characterizable. I have never seen a resolution of this paradox.

Syllability

Noel Longmore of London, England, advises me that it is an old wive’s tale that STRENGTHS is the longest one-syllable word in our language. There are other words, equally long, and not even plural forms. Can you find some of them?

Looking in the opposite direction, Mr. Longmore and I have compiled a list of 4 letter words with 3 syllables. Readers are challenged to extend it: AERO, AERY, AIDA, AREA, ARIA, IDEA, IOTA, IOWA, OHIO, OLEO, Olio, and UREA.

There’ll Always Be an Albion? Anglia? Britannia?

The latter two names, at least, are the Latin equivalents of England. Most readers know also that Gallia denoted France—Hibernia, Ireland—Caledonia, Scotland—
Hispania, Spain, etc. See how many you can match correctly from the list below, in which both Latin and English country names are listed alphabetically:

<table>
<thead>
<tr>
<th>Latin</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>BATAVIA</td>
<td>HOLLAND</td>
</tr>
<tr>
<td>CAMBRIA</td>
<td>MOROCCO</td>
</tr>
<tr>
<td>DACIA</td>
<td>PORTUGAL</td>
</tr>
<tr>
<td>HELVETIA</td>
<td>RUMANIA</td>
</tr>
<tr>
<td>LUSITANIA</td>
<td>SWITZERLAND</td>
</tr>
<tr>
<td>MAURETANIA</td>
<td>WALES</td>
</tr>
</tbody>
</table>

**Geographic Coincidences**

Caledonia was the old Latin word for Scotland. The medieval Latin word was Scotia. Thus Nova Scotia (SE Canada) and New Caledonia (SW Pacific) are *synonyms*. The "geographile" should have little trouble finding other examples such as New England—New Britain or Newport—New Haven.

**Vocabulary Quiz**

Most of us have had the experience of reading, hearing and even using a word for years and finding out one day that we never really knew its meaning. The following list of ten is offered as an example of familiar words found in practically all pocket-size dictionaries, more than half of which the majority of readers will find difficulty defining correctly. Take a good stab at each one, check with your dictionary, and rate yourself as follows (counting "close" or partial definitions as wrong): 3 right—passing; 5 right—excellent; 7 right—either your vocabulary is incredible or your scoring is too lenient.

- akimbo
- askance
- captious
- cogent
- fulsome
- impeach
- gravid
- oakum
- quizzical
- turgid

**Mathematical limerick**

I forget exactly how Lewis Carroll’s poem goes in which he rhymed “12½” with “quadratic surds,” but he may well have been the first *poetician*. Martin Gardner has printed in his amusing *Scientific American* column, “Mathematical Games,” a number (rather large, of course) whose designation in plain English is a limerick. This limerick was composed by Leigh Mercer. Inspired by the muses of mathematics and doggerel (shaggy) I have composed an equation. Your job is to impart to it the meter and rhyme scheme of a limerick. If you give up, consult the answer section.

\[
\frac{12 + 144 + 20 + 3\sqrt{4}}{7} + 5 (11) = 9^2 + 0
\]
Anagrams

Generally speaking, the longer the word, the more difficult it is to find the anagram. However, here are three 5-letter words for which common but elusive anagrams exist. Time yourself on these. If you find all three anagrams within five minutes, you are in the expert category: FLOAT, GAMMA, MANGO.

Double Duty

The word “deduction” serves as the noun form for two different verbs. When associated with “deduct,” it means “subtraction”; with “deduce” it means “logical inference.” I can think of only one other such example (see solutions.)

There are also plurals which have two different singular forms. One of the two that I know of is “axes,” the plural of both “ax” and “axis.” Try to think of another.

A Plurality of Plurals

Webster’s New Collegiate Dictionary provides an example of the reverse phenomenon—a common word with three acceptable plurals. The word is “octopus” and the plurals, listed in order of acceptability, are “octopuses,” “octopodes,” and “octopi.” The latter form, which seems to be heard most frequently, is probably frowned upon by the lexicographers because of the grafting of a Latin plural form on a Greek root.

Autologs and Heterologs

Bertrand Russell’s famous paradox: “Is the class whose members are those classes which are not members of themselves a member of itself?” has an equivalent linguistic form. Call any adjective which correctly describes itself “autological.” Examples: polysyllabic, sesquipedalian, penta syllabic, terse, inflected, enunciable, inanimate, syllibant. The reader can think of arbitrarily many additional examples such as non-bovine, unradioactive, etc. However, I would like to know how many autologs can be added to the list if negative forms, including “inanimate” and “intangible” are barred. Readers are solicited for contributions. Now back to the paradox. Any adjective which is not autological is, by definition, “heterological.” Examples: red, bovine, sympathetic, etc. Every adjective is either self-descriptive or non-self-descriptive (but not both), i.e., belongs to one of the two mutually exclusive classes of autologs and heterologs. To which class does the adjective “heterological” belong? If it is autological, it is heterological, just as the autolog “terse” is terse. On the other hand, if it is heterological, then by definition it is autological. Logicians have performed a very ad hoc and unsatisfying revision of the basic laws of logic in order to patch up this vexing contradiction. To back up this dogmatic assertion let me suggest two different classes: the class of intangibles and the class of concepts. It seems to me intuitively obvious and logically sound to consider each of these classes to be a member of the other. But one consequence of the standard “resolution” of Russell’s Paradox is to deny that possibility.
Howard Bergerson has advised me that nouns and verbs can be autologs too. Autological nouns are easy to think of: word, concept, noun, invention, tool, etc. Autological verbs are harder to come by, and I would welcome any that you can supply. The best one that comes to mind is “abstains.” (Who ever heard of a verb drinking a highball?)

Point of View

Russell is credited also with inventing the game, “Conjugating Irregular Verbs.” His original example is: I am firm. You are obstinate. He is a pig-headed fool. This game offers almost unlimited scope for creativity. How about:

I am thrifty. You’re a bit of a tightwad. He’s a real skinflint.
I’m an idealist. You’re a Utopian. He’s a fuzzy-thinking radical.
I’m cautious. You’re timid. He’s chicken-hearted.
I’m glib. You’re garrulous. He can’t keep his mouth shut.
He’s a blundering idiot. You’re prone to err. I’m human.
He’s an alcoholic. You drink too much. I have hepatitis.
He’s lascivious. You’ve got an eye for the girls, haven’t you? I’m human.
I’m clever. You’re crafty. He’s insidious.
I’m diplomatic. You take a pragmatic approach to the truth. He’s a hypocrite.

The game lends itself to any form involving shifting perspectives. For example:

RICH MAN POOR MAN

<table>
<thead>
<tr>
<th>tire</th>
<th>lazy</th>
</tr>
</thead>
<tbody>
<tr>
<td>lavish</td>
<td>extravagant</td>
</tr>
<tr>
<td>eccentric</td>
<td>crazy</td>
</tr>
<tr>
<td>self-educated</td>
<td>unschooled</td>
</tr>
<tr>
<td>chic</td>
<td>garish</td>
</tr>
<tr>
<td>blunt</td>
<td>crude</td>
</tr>
<tr>
<td>democratic</td>
<td>plebeian</td>
</tr>
<tr>
<td>candid</td>
<td>vulgar</td>
</tr>
</tbody>
</table>

Readers are invited both to furnish additional examples in the 1st-2nd-3rd person and the rich man-poor man versions and to invent new versions of their own.

Too Many Definitions

The English language is rich in alternative ways of saying the same thing with slightly varying emotional nuances. Thus it is no surprise to find a multitude of synonyms for certain words such as “brave”: bold, valiant, valorous, courageous, doughty, intrepid, plucky, gallant, stout, heroic, dauntless, fearless, and a few others that escape me. Or “nonsense”: eyewash, poppycock, claptrap, drivel, gibberish, gobbledygook, rot, hogwash, flapdoodle, bosh, bunkum, hokum, bilge, balderdash, twaddle, tommyrot, rubbish, garbage, pirot, humbug, and fiddle-faddle.
The opposite phenomenon is the word that means many things. There are many such words which take up nearly half a page of the big Webster’s. There are two words which come to mind, both of them with noun and verb denotations. However, to keep the list of definitions within limits, I will define the first word in its noun form only and the second in its verb form. Ten different meanings are given for each word, and the reader’s task is to discover the word defined.

First word: a chief, a lump, a male swan, a stocky horse, an old Spanish coin, a string of lactose crystals, a sea-gull, a blow, a spider, a pier

Second word: to plant, erect, transfix, hurl, pave with rubble, arrange, expose for sale, start fermentation (in brewing process) by adding years, mesh, plunge

One right entitles you to gloat (see answers). This kickshaw suggests a somewhat different sort of exercise in wordplay based on the concept of

**Homophones**

Although there is disagreement on the proper definition, we will say that “homophones” are homonyms which differ both in meaning and spelling. Thus “sow” (to plant) and “sow” (female pig) are homonyms but not homophones, as are “suite” and “sweet.”

The game consists in choosing homophones with at least three different forms and defining each form briefly. The object of the contestant is to discover the homophones. Example: a fruit, a couple, to cut. Answer: pear, pair, pare. Try this group of triphones with one tetraphone thrown in:

- summit, glance, resentment
- food, proper, to measure
- before, successor, to ventilate
- to rule, to check, to bestow abundantly
- boundary, carried, brought into existence
- dale, to be of worth, to obscure
- incense burner, device which responds to physical stimuli, official critic
- hidden supply, throng, consorted with prostitutes
- withered, prophet, to scorch, to wrap (a corpse)

**Swifties**

To be swift is to be quick, which is to be alive; hence the Swifties are not dead yet. Here are a couple:

“That’s a mighty big whale” said Captain Ahab superficially.

“Thanks anyway, daughter-in-law, but I can make it back to my homeland and live comfortably without your help” Naomi shouted over her shoulder ruthlessly.

**Isomorphs**

Words with identical repeated letter patterns are called “isomorphic.” A good example of a pair of isomorphs are the words SWEETHEART and BLOODHOUND. (Readers are challenged to find the two other English words which...

**WORD WAYS**
share the same 12345678 pattern.) Some words are immediately recognizable from their letter patterns, e.g., 12234546 uniquely characterizes BOOKKEEPER. Around 1914 the simple cipher FIESTA ALFALFA could admit only one decipherment: TRIPLE ENTENTE. Come to think of it, there are no other isomorphs of ALFALFA and ENTENTE, regardless of date. Here are some increasingly difficult patterns for which you are asked to supply the words:

Two synonyms, both with the pattern 12123
122262
122614
121343152
12134134
1234235631131

Solutions to the above appear in the Answers Section. The following is posed as a challenge problem. Its solution will require a combination of diligence, insight, and deduction. It will be open to solvers until December 31, 1969:

Find three synonyms with respective word patterns 1 2 3 4 5 6 7 8; 9 10 5 2 4 5 3 1 5 10 11 8 12; and 6 13 14 4 5 3 1 7 15.

The Insolvent Oracle

Recently I opened a Chinese fortune cookie and read the following perplexing message: “Avoid laughing friends in business and visa versa.” Never mind the unusual spelling. What does it mean? (It’s my belief that there’s less to it than meets the eye.)

Crash

In the game of “crash” two players each covertly writes down a five-letter word. (Some sophisticates who don’t mind dragging the game out interminably use six or even seven-letter words.) The players then fire simultaneous “salvos” at each other. A salvo is a group of five five-letter words selected in an attempt to deduce your opponent’s word. He must write after each word in the salvo the number of “crashes” it makes with his secret word. A crash is the occurrence of the same letter in the same position. Thus if the secret word is REGAL, then LARGE makes no crashes with it, while BEGIN scores two crashes (in 2nd and 3rd positions.)

Suppose in a game of crash your first salvo of STRAW, HOLLY, TEPID, MINUS, and COURT draws five zeroes. On your second salvo, each of your five words draws one crash: BRING, GLOVE, SHEIK, TRUCE, and FLIES. The winner of the game is the first player whose salvo contains his opponent’s word. Can you guarantee you will have his word in your next salvo?

For Mathemagicians

In Volume I, No. 4, p. 216, of WORD WAYS, Dr. A. Ross Eckler posed a challenge, based on an old card trick in which a group of code words is used to produce
a mystifying effect. The group consists of $N$ words of $N+1$ letters each with the two features: 1) each word contains one pair of repeated letters, and 2) each pair of words contains one common letter. For the twenty-card version, Dr. Eckler quotes the standard group: THIGH ATLAS BIBLE GOOSE. An older Latin version is: MUTUS NOMEN DEDIT COCIS. For the thirty-card version of the trick, he suggests the words LIVELY RHYTHM MUFFIN SUPPER SAVANT, a remarkable coincidence, since I have been using a group for many years in performing the thirty-card version which uses two of his words: PILLAR RHYTHM MUFFIN CACTUS SNOOPY.

The challenge to produce a mnemonic group for the 42-card version (six 7-letter words with the two above properties) seems within the grasp of diligent logophiles. Only 21 of the 26 letters would be used, permitting the solver to neglect J, K, Q, X, and Z. I expect the problem will have been solved by the time this KICKSHAW appears, in which case, no doubt, a note by Editor Bergerson will follow.

Minicryptogram

If 12, 23, 34, and 45 are all common words, what is a 43125?

The Last Shall Be First Department

Many words such as LYRICALLY exhibit the same combination of letters (in this case, LY) at their beginning and end. Find three geographical names of this type with respective patterns: - HI -, - A - , - RON -. Right you are: OHIO, MIAMI, and TORONTO. Here are some tougher ones: - . - - GRO - - - - , - . - AU - - , - . RE - , - . ORI - - , and - . G -. None of these are proper names, and the last has three solutions. If you become discouraged, see the Answer Section.

Twelves


If you were asked to list all twelve members of each of these groups, how many groups could you list successfully?

A Challenge

Readers are hereby challenged to concoct a logical, intelligible and grammatical sentence beginning with the words: "If I was the President . . . ."

WORD WAYS
Two Crossword Puzzles

We close the current KICKSHAWS with two small crossword puzzles: a mini-puzzle, exhibiting the maximum in "keying" (each letter doing double duty) and another resembling in pattern a type previously introduced in this Journal by Temple G. Porter, in which only 9 of the 33 letters are keyed. The decision as to which is harder is left to the solver.

Across
1. which
2. European country
3. notion
4. score of quires

Down
1. dam
2. skin
3. region
4. harnessed draft animals

Across
1. a cereal grass
2. novice
3. undivided

Down
1. vent in the earth's crust
2. nimbleness
3. a pungent herb