The term rebus has, during the past century, been applied to several different types of word puzzles. This multipart article examines the varieties of the letter rebus, a puzzle form which has been extensively featured in the pages of the Enigma, the official publication of the National Puzzlers' League, during the past sixty years. In fact, counting such varieties as the suber (or reversed rebus) and the rebus alternade, a hybrid puzzle combining the basic rebus with a puzzle taking every nth letter from a word, there have been more than 5500 such puzzles published.

General Properties of the Rebus: Taxonomy, History, Ambiguity

Briefly defined, the letter rebus is a type of code in which a word or phrase is represented by an array of letters or symbols, such as B for abalone (a B alone) or SR for rafters (R after S). The parenthesized versions, with spacing rearranged to clarify the rebus meaning, are called rebus descriptions. A rebus can be either literal, as the above examples illustrate, or partially or wholly phonetic, such as II for two black eyes (two black Is), or U for after tea (after T). In this article, words, syllables or letters labeled with an asterisk are to be given phonetic values before spaces are rearranged to give the rebus description; common phonetic changes include cʰ(see), seə(C), eyeə(1), eyesə(1s or II), youə(U), areə(R), ateə(8), for(e)əXs(XXXX), to(o)ə(2), and wonə(1).

Not surprisingly, a great deal of ambiguity can be introduced by such extreme compression of a message; some single-letter rebuses correspond to dozens of possible words. As a consequence, the rebus is usually followed by an additional clue in a short verse to point to the word intended by the constructor.

When one is encoding a phrase instead of a single word, the rebus description need not preserve the same word-divisions as the original phrase, as it did in two black Is. TEHEERS, the rebus form of tea, it cheers, is described as Te,aitch,EERS which preserves letter-order but not spacing, making a more interesting puzzle. Surprisingly, it took several years for NPL rebus-makers to recognize this possibility; the above example, the first one in the Enigma, appeared in 1927.

Broadly speaking, rebuses can be sorted into a number of different classes:
Letters as components of words: replacement of a word with a synonym or a specific example of a class
Letters as sounds
Letters themselves
Characteristics of individual letters (existence, faintness, capitalization, script, fanciness, mutilation, rotation)
Position of individual letters (with respect to verse, title, page, etc.)
Relative position of individual letters to each other (before, after, up, down, diagonal, inside, outside, first, last)
Groups of identical letters (cardinal and ordinal enumeration)
Groups of different letters (rearrangement, alignment, spacing)
Cancellation and replacement of letters (including rebuses with no letters); partial descriptions of words
Specialty rebus treatments (mathematics, chemistry, music, etc.)
Vocabulary: names of letters, symbols, etc.; names of general operations (visualization, placement)

In this taxonomy, the word letter can mean a number or other symbol as well. Naturally, the edges of these categories are a bit fuzzy, and it is not always easy to decide in what category a rebus belongs. Many rebuses have components belonging to two or more categories. All of these categories are described and illustrated in detail in this article.

Several different techniques have been evolved over the years for presenting the rebus. This is best illustrated by showing the various ways that a missing letter can be clued. For example, about (AB out) might be indicated by:

1) AB
2) the letter A standing alone
3) the entire alphabet, omitting the letter B
4) removal of B from all words in the accompanying verse
5) removal of B from the title, with A in front: ARE US

It is worth noting that the rebus description can be ambiguous; in the example above, is the letter B to be removed, or both the letter B and the letter A? This type of ambiguity crops up often in the relative positioning of letters; for example, is thinks to be represented by KTHS (TH in KS) or TKHS (T; H in KS)? If one were to develop a set of rules governing rebus construction (an endeavor which, if carried out, would fill an article of many pages) one would presumably opt to have an operation govern only the minimum necessary letters.

As previously mentioned, short rebuses are especially ambiguous. To illustrate, consider the rebus PS, which over the years have represented PleadingS 1926, PaddingS 1929, backSPread 1976, postPoneS 1976, posts cryptic [P.S. = postscript] 1976, past PresidentS 1977, PlaterS 1977, short PIECES 1978, printemPS 1978, PinbeforeS 1978, PSottis 1978, planisphereS 1978, turnSPit 1978, aphere-
Ambiguity in rebus construction can arise as the result of uncertainty in which order various positional operations are to be performed. In computer programming, such ambiguity is resolved by the use of parentheses; this device is used below to show the possible alternatives:

\[
\begin{align*}
\text{ST} & \quad \text{ST} \\
\text{TH under (ST on E)} & \quad \text{E vs. (TH under ST) on E} \\
\text{CM} & \quad \text{C ere (M on Y)} \\
\text{Cere (M on Y)} & \quad \text{CM}
\end{align*}
\]

Rebuses can be ambiguous in other ways as well. Often, the rebus description is so awkward that it is not clear what rebus illustrates it. This problem is best illustrated with the use of the preposition on in a rebus of relative position. This little word can appear in many places:

1) at the beginning: on Y X is; on I, ON
2) in the middle: H on K; PR is on ER
3) at the end: C, O on; V is in; P O is on

Among these, the third offers the greatest scope for misinterpretation; is C, O on to be interpreted as a short form of C; O is on it, leading to an O placed above C, or C on O, leading to a C placed above O? Unfortunately, both interpretations have coexisted in the Enigma, the second being more often encountered in the early years and the first more recently. (At least once, the same word was encoded both ways – P, O is on was represented by O over P in 1928 and P over O in 1933!)

Often, a word in a rebus description can be interpreted in rebus form in several different ways. An excellent example is provided by the little word in, which has been used to mean

1) between other letters in a horizontal line: TLARH (LA by R in TH)
2) part of a larger word: BRAN (RA is in BRAN)
3) alternating letters with the enclosing word: AWPOPRLME (a WORM in an APPLE)
4) surrounded on all sides by other letters: DVI (a V is in DI-C A)
5) between other letters in a vertical alignment: WD (G on E with the W in; D)
6) outlining the shape of a letter: A M (A MUT in Y)
7) enclosed by a large letter: U (spot T in G)

The standard format for the in instruction is YXZ: X in YZ; thus,
problems arise not only when in is at the end of a word, but also when in is followed by a single letter (typically, a word ending -ing). One solution to the latter problem is given in the seventh example above; another solution is to interpret XYZ as XZ, in Y (for example, HPSP is the rebus for H, a P, P in eSS). Unfortunately, the penultimate in has been interpreted in another way as well: FLG is the rebus for F, L in, G.

The principal focus of this article is on the elaboration of the letter rebus since 1921 in the pages of the Enigma. Although a full history of the letter rebus since its origin in the nineteenth century remains to be researched and written, a brief summary will be given here. During its earlier heyday in the early 1880s, the letter rebus was generally regarded as a difficult, even sometimes unfair, puzzle, and it fell into disfavor for a generation or so; in 1896 William P. Bourke (writing under the pseudonym of Kosciusko McGinty) wittily derided the rebus, saying

I met a Rebus, to my great discomfiture, in one of our departments the other day. I thought I had rid myself of its presence forever when I had entered our puzzledom. I had been rather chummy with it in my younger days, but for nine years had forgotten it – or tried to. I have frequently tried to convince myself that Puzzledom treated the Rebus rightly in ostracizing it; that it was a feeble, puerile composition, all well enough for us when school-boys, but "to be laid aside with the toga praetexta". Never was puzzle invented, approachable in so many glitteringly unsuccessful ways; so long on possibilities and so short on performance. When I first made its acquaintance, though, it was fresh and open. As TH under ER, or D is Cover, or PO is on ED, it scorned deceit, and I had a deal of respect for it. Then it was a simple statement of fact; its answer evidence as incontrovertible as the defendant's letters in a breach of promise suit. But in a few months it developed a capability for quibbling ... It acquired an irritating habit of putting "See!" in every sentence some time after, it patiently tried to explain things to me and its "See!" became "You see." I was not overpleased with the variation.

His disaffection with the rebus reached its climax when he failed to solve a rebus characterized by a high narrow letter A, with the answer Innocents Abroad (in no sense A broad).

I know that the Rebus and I cannot float down the stream of existence together. We are like the iron and the earthen pot in Esop; and I am not sure that I am the iron one. At all events, I am willing to retire in the Rebus' favor. I am not going to risk a collision.

Sixteen of these early rebuses were reprinted in the Enigma in 1928; it is hard for the present generation to see what all the fuss was about, for they are indistinguishable from the modern variety. Most of the variations in the taxonomy suggested above had not yet been thought of. Ten of the rebuses can be characterized as showing relative positions of letters, and three more, ad-
For many years, the Enigma banned (or printed with great reluctance) rebuses termed enigmatic. Never carefully defined, this word apparently referred to rebuses in which only part of the answer was present: V for the center of gravity, or V for part Y. Since 1970, these have been accepted without dissent.

Rebus Variations

Over the years, the rebus has spawned several variations. The first to appear was the suber or reversed rebus, introduced by Morton Lewis Mitchell (Molemil) in the Enigma in 1938 (however, IIV was given as the rebus for neves in 1925). In the suber, the letters in the word or phrase are read from right to left to obtain the rebus description; for example, hammock reverses to K, comma, H which generated the rebus K, H. The suber enjoyed a modest popularity in the pages of the Enigma in the late 1940s and early 1950s, but then died out; it was not until 1972 that Philip Cohen (Treesong) revived the technique, christening it a suber. Not surprisingly, words can be found for which both a rebus and a suber can be constructed. The 1973 catalineta yields the rebus description C TA: C at a line; TA, and the suber description XILC: a ten, L, L at a C.

Philip Cohen was also the father of the rebus alternade (later shortened to rebade), introducing it in a composing contest in 1974. In the rebus alternade, a set of input words is presented LIT in a list, and the rebus description is read off column OWE by column from left to right in this array. For example, OR the array at the left reads look, I write E, for which KIN the rebus is N. At the same time, he invented the suber alternade in which the rebus description is read up the columns from right to left, and the bigram rebus alternade, in which pairs of letters are taken out in columns. NE AR BY An example of the latter is given at the left; the rebus description is near AR, RO by WS, for which the rebus is ARROWS (the same as the second input word, a minor tour de force). In 1978 Gary Pischer (Uniqorn) constructed a rebus alternade in which the four input words were tere transposals (TINSEL, ENLIST, SILENT, LISTEN) and in 1983 Edward Wolpow (Newrow) constructed one which was a word square (OMIT, MONO, INKS, TOSS with the rebus description omit M, O no ink, S toss).

The most recent development in the rebus field is the progressive rebus, devised in 1982 by Steve Wilson (Stitch). Here, the word for one rebus is the rebus for the next, as in grunt (G runt), leading to the rebus g grand aunt (GR and a UNT), leading to the rebus GRUNT

A final rebus variation, the so-called in-and-out rebus, never caught on. A single example by Philip Cohen survives from 1974. The accompanying verse text contained the word dALLY; the solver was supposed to discover the phrase read real IT from the
Jacency (ME and ER, B and EAU, A and an A); only three (B right on B each, tu* Be rose*, sure tis HIP) used other devices.

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letter rebus IT, and replace dALLY with "dread reality".

The infinite richness and variety of the modern letter rebus is best illustrated by examples, and this article contains many hundreds of them. A more-or-less standard format is used. The phrase encoded by the rebus is given, with the letters actually appearing in the rebus highlighted by capitalization; sometimes the rebus itself is given preceding the phrase (for example, SGT: outSTanding and .U: spec*Ulator*). If part of the phrase is phonetically interpreted to obtain the rebus description, this is signalled by an asterisk; furthermore, those parts of the phrase for which a synonym or example must be found are underlined (for example, XRenogeneity). In almost every case, the earliest-known two or three Enigma examples of the rebus device being discussed are illustrated. To conserve space, only the last two digits of the year are given, and the author is not identified, and later appearances of the same rebus are not recorded.

Characteristics of Individual Letters

One of the earliest popular rebus types in the Enigma was a description of the physical nature of the letter or symbol serving as a rebus. The simplest description of a letter is an assertion of its existence:

Visit 21, oTitis 22, myoSitis 23, anAitis 24, aBaTis 25
tisAnE 21, tisSA 27
AWaTaWare 25, areNA 26, areaSRs 35
bethel 25, thisTle tube 83
Siam 21, aZiam 22, amazed 22, imaGe 24, imp 24, Limit 31
heresY 19, aDhere 21, Where 21, hereFORD 21
theresA 19, isOthere 27
Lie 24, DIXie 55, Widest 75, anXieTies 83, froniisPieCe 80 [i.e.] geronimO 73, egOtisTic* 83 [e.g.]
perseCUTe 26, Disperse(d) 32, Aperse 27 [per se]
terPsicHorE 72, music 75 [sic.]
thisTLE 22, PHthisis 22, thisBE 24
a Pat hand 58, Bath and 79
Know 50
noNexistent 67, Sextant 71

an Ethereal thing 33, an Ethereal one 33, Etherealistic 33
realisM 61, realisT 62, areal Way 61
everY 21, Lever 31, ENDeavor* 34, Sever 72, Clever 78
Fissure 23, Insure 29, sureX 48, shoQ 57, areal MEaSUREMENT 72
ASCertain 66, aPositively 67, Tactually 25, Factual 78
Disaffirmed 70, intentionalism 75

Erebus 21, rebuSH 60, DEsire bus 73
rub ricE 75, rubricatED 79, to* rue* brick* 81, rub ricHaRD 79
characterY 74, characterisTic* 79, characterisatIOn deleted 74
enSign 54, Tething 81
Discontent 67, Disembodied 79, calliTHUMP 60, termitE 83

Discount sometimes.
Sometimes, HashHish 2
V: Visin
Beyond

Invisible.
Invisibil

Nuclear

manifest.

Poverty.
blackEN

Kissable

Even more,

the letter 78 or NOO.

In contrast,

lightness (of dots; circles), E
do of the G.

However,

Thunder.
very light.
ronson

YES, de

SCylla

Stop on

yours of

One rebus

and last

great LIFF.

How simply,

hand, the

simpleX

plainT

bared 2

commonS

pie*bal<

nakedwE

Denude

star-kis
Discounted 38, Enumerated 31

Sometimes, the rebus existentially stutters: MT: theMaTisT 25, H: HasHisH 22, ST: aneStheTisT 24, M: MisoneisM 77, IT: c*anTisT 80, V: Vis-a-Vis 69.

Beyond mere existence, a wide variety of properties have been described. The degree of clarity or darkness of a letter was specified quite early:

- INvisible 22, one NaTIon INDvisible 43
- unobscureD 25
- nuClear 54, macronuClear 79, nuClear Blast 81
- manifestO 25
- PoweR- strm 78, overtone 55
- dark eyes* 52, darkeNing 80
- blackEN 19, blackBall 26, black KnighT 27, black eye* 28
- Kissable 24, Usable 76

Even more emphasis was clued by a set of rays emanating from the letter I in DI: DhotI 80, or by underlining in N: underlineN 78 or NOOP: dessertsPOON 72.

In contrast, it took awhile to hit on a system for indicating lightness or faintness. Vindicated 40 was clued by a V made out of dots; a similar strategy was used for a in 1977 (alpha particles), E in 1973 (all of the scoring took place in the last quarter of the GAME), T in 1980 (stibniTE), D in 1982 (shredDeD wee*T).

However, the commonest strategy has been to print the letter more lightly:

- THunder and lightNing 75, lightHOusekeepinG 81, a light EatER 83
- very lightS 80
- RonSon lighterS 73, CandLElighter 76
- YES, depress YOUR dimmer switchEs 73
- Scylla i trap 73
- Stop on a dimE 72
- yours of the NinTH inST. receiveD .. 82

One rebus achieved lightness by a negative instruction; the first and last letters of LIFE were darkened, the phrase being it's a great LIFE IF you don't weaken 81.

How simply or elaborately can a letter be presented? On the one hand, there is:

- simpleX 21, simplE 30
- plainT 21, plainTIFF 28, plainTIVE 29, plane*T 56, eXplain 58
- bareD 24, the bare IDEA 25
- commOnS 25, the ordinary commOnS 39
- pie*bald 77
- nakedweEd 80
- Denude 26
- star-kisT 81

On the other, one can see:
The completeness of a letter is another relevant characteristic:

**Consolidate** 41, solidI 43, solidUs 64, solidARnoSC 82
**join** 30
**perfect** 25, perfectIonS 29, BE perfect and entire wanting nothing
**perfectioniST** 72
**pure** 24, COVer-up 77
**conStrue** 30
natural Gas is 76

When only part of a letter is shown in a rebus, it has usually been called an enigmatic rebus. The first example was, in fact, a non-example: LE clued bustLE in 1924, but in fact the letters were intact and the verse advised the reader to "break up these letters". Perhaps the most obvious letter-fragmentation is the halving of W, producing a V. V was clued by the phrase halfWit in 1935. VKE by half aWaKE in 1973, VY by meet halfWAy in 1981, VYVs by the parting of the WaYS in 1983, and VY by splitsaW in 1979. The top (or bottom) half of B has been exhibited with several clues: the bottomless Pit in 1936 (Pitt in 1983), topless Bit in 1969, and Behalf in 1981. This rebus is indistinguishable from the top half of R, clued by semiRamiS's in 1975 and semiRamiS (accompanied by an S) in 1983. Probably the commonest instruction for letter-mutilation is part, as evinced by TF: tea' partialY' 57, TV: tea' partY 57, Y: partY 70, and SF: SpartaS 74, plus the similar F: partialLY' 63 and IY: partially 83. Other techniques are:

- oo: pieces of eight 34
- IVI: take theM apart 57
- IVI: quarterN 83
- JY: after the break of DaY 80, AA TTTT: breakFAsT cereal' 82
- PMG: PeMbrokeS 83
- RC: doRSalmost 83
- P: Bb-gun' 62
- AQ: A raised and sunken SYStem 75
- "a pointless question, mark 80
- O 44P: on Behalf Of our sPonSor 83
- BrS/
- R: marT 83, f: marPlots 81
- RA: piAno bar 82

The 1973 rebuses IF (I was cut off in the northeast, and 'e was cut off in the south) and iCA (nearly the entire eastern half of AFRICA) were subtle, but the most enigmatic one was = in 1980, clued by double-cros*Tic' -- in other words, the horizontal bars belonging to two lower-case Ts!