ON REFLEXIVITY IN WORDS

ANTHONY SEBASTIAN
RENEE MERRIAM
San Francisco, California

*In August 1969, Dave Silverman suggested the name **autological** for adjectives correctly describing themselves (polysyllabic, terse, enunciable, sibilant) and posed a paradox: if all adjectives are either autological or heterological, in which class is 'heterological' to be placed? As Howard Bergerson and Philip Cohen later noted, the concept of autological is generalizable to other parts of speech (noun, proparoxytone). In his book Beyond Language (Scribner's, 1967), Dmitri Borgmann introduced the related subject of **suggestive words**: **bow tie** with the arm of the T in the shape of a bow tie, **war** with the A in the form of a rising missile, etc. The following article is believed to be the first one to explore the subject of self-referential words in detail.*

In a wonderful series of now anthologized articles originally appearing in Scientific American, Douglas Hofstadter discusses the many varieties of self-referential sentences (e.g., "This sentence no verb"). Words--a sentence's elements--can also be self-referential. Hofstadter did not discuss words as self-referential entities, however, though he implied their existence in noting the ubiquity of the phenomenon of self-reference: "It happens every time anyone says 'I' or 'me' or 'word' or 'speak' or 'mouth'".

Word is an obvious example of a self-referential word. **Word**'s definition applies to itself: **word** is a word. It makes a statement about itself. Similarly, **noun** is self-referential. **Adjective** and **verb** are not.

In this article, when a self-referential word, or reflexive word of any kind (vide infra), is mentioned, it appears in bold type; when it is just used, however, without intent to refer to it as a word, it appears in normal type. Whether self-referential or not, all words in this article will appear in bold type when they are mentioned in contradistinction to being used. The use-mention distinction is illustrated in the preceding paragraph.

A. Ross Eckler pointed out to us that the subject of self-reference in words has been discussed previously in Word Ways. In the August 1969 Kickshaws, Dave Silverman introduced "autological" for words that correctly describe themselves, and he offered these examples: **polysyllabic, sesquipedalian, pentasyllabic, terse, inflected, enunciable, sibilant**. Howard Bergerson, in the same issue, extended autologs to nouns (e.g., **concept, invention, tool**) and verbs (e.g., **abstains**).

In referring to themselves, such autologs as **word** and **noun** reference their logological nature. They are self-referent at the most fundamental level: words about words as purely verbal entities. They may be distinguished from other self-referential words that similarly reference their structure but whose structure is not specifically logological, such as **pattern, permutation, finite, object**. The latter list can be greatly extended by consulting a thesaurus; the former comprises a smaller, more select set, which includes, in addition to those already mentioned, **letters, syllables, adjectival, verbal, morphemes**.

There are many self-referential words of logological interest, for example: **UPPERCASE, lowercase, definable, definable, defined, symbol, symbolic, code, lexeme**. In the November 1971 Word Ways, Murray Greenblatt offered **English, legible, typed** and **horizontal**. Note that some words are conditionally self-referential, requiring special circumstances: **written, spoken, illegible**. These latter examples each happen to have conditionally self-referential antonyms.

Darryl Francis, in the February 1978 Kickshaws, introduced a unique variety of self-descriptive word-like letter-sequences that included **mispelling, imperfect** and **defective** (the latter two having inverted "e"s), **Decembrrr, twogether, HUMiLiTY,** and **neverendin**. (As **misspelled** is so often misspelled **mispelled**, the latter may eventually supplant the former, no doubt subsequently to be misspelled **misspelled**.) Other whimsical examples can be added to Darryl Francis's list: **oreshortened, trunc, vwllss, cndnsd, c@aract, [bracketed], qqqqqueue, -ated, p,u;n:c!t"u'a.t-e?d, underscored, :ic, stststutter, ddoouubblleettss, dlgltal, sur++++, exxxxcess, S*T*A*-R*R*1*N*G**.

Self-referential verbs (e.g., **symbolizes, encodes, awaits, spells**) seem to possess a special quality. In symbolizing, **symbolizes** symbolizes itself! Although that kind of reflexivity does not differ fundamentally from that of self-referential non-verbs (e.g., **information** supplies information at the same time that it declares that it is information), the verbs are livelier (more action).

Pronouns: **this** (this word), **these** (these letters). Adverbs: **here, adverbially**.

Some self-referential words assert their potential: **speakable, printable, translatable, ponderable, reusable**. Reusable has an interesting recursive quality. In asserting their potential, some words in this class seem self-important: **valuable, functional**. Some might be misinterpreted even as arrogant: **unique, notable**.

Some words are self-referential because they announce what they are not: **nonhyphenated, unabbreviated, nonalphabetized, unambiguous**. Dave Silverman (vide supra) first pointed that out with **nonbovine** and **unradioactive**. Given the increasing environmental pollution with radioactivity, **unradioactive** might be radioactive, however.

In the August 1976 Word Ways, Philip Cohen reported on autological metric feet (**spondee, trochee**) and associated adjectival forms (**dactylic, ditrochean**), later (May 1977) noting that **proparoxytone**

is a proparoxytone.

Among the most logologically intriguing self-referential words are those that reflect their semantic nature: **information, fact, datum, message, meaningful, antientropic**. In organizing letters into a pattern of information, **antientropic** succeeds appositely in characterizing itself, since, according to information theory, entropy is missing information.

Some sentences consist of self-referential words only: "Word encodes information." Some such sentences are themselves self-referential: "This word sequence encodes information."

There are undoubtedly many logologically interesting self-referential words not mentioned in this article. "Autolog" is a logical and appealing word for self-referential words. The existing word, "autonym," which means one's own name (cf. pseudonym), by extension could also be used to refer to self-referential words (cf. synonym).

Self-reference is only one expression of the fundamental natural phenomenon of reflexivity. Words express the phenomenon whenever they call attention to themselves. Besides self-reference, another expression of reflexivity in words is self-contradiction: **wordless, uninformative, useless, nonexistent, cryptic, infinite, invisible, monosyllabic, obsolete, neologism**. Self-contradictory words are oxymorons. They call attention to themselves by allowing themselves to be caught lying. They are reflexive without being self-descriptive or strictly self-referential.

A vital form of reflexivity in words is self-replicability. A self-replicating word is one in which the recipe for its exact replication accompanies its expression. **OK**, whether used as a noun, verb, adjective, adverb, interrogative or interjection, is a fecund self-replicator. In speaking the word, the exact steps required for its replication are spelled out: "'O' then 'K'".

The lexicographer specifies the pronunciation of **OK**, and other common self-replicating words, such as those in the following list, and thereby underscores both their legitimacy as words and their self-replicative force: **ABC** (learning the ABC's of chemistry), **BB** (shooting BB guns), **ID** (new ID bracelets), **OD** (OD'ing on chocolate), **VIP** (receiving VIP treatment). In the Random House Dictionary of the English Language (Second Edition, 1987), the pronunciation of each of these words is specified.

The indefinite article, "a", which also serves as a noun referring to A-shaped items, exactly prescribes the recipe for its replication. There are 25 additional single-letter English words (**b** through **z**) that are self-replicating in that sense. Such single-letter words are also self-referential.

Many self-replicating words in common use began life as acronyms (**SOS, PTA**), some of foreign parentage (**KGB**). Might not the frequency of self-replicability among acronyms account in part for their proliferation in the language? Certainly, their correct spelling

is easily learned. Are there more self-replicating than nonself-replicating acronyms?

Other self-replicating words are not apparently or strictly of acronymous origin: IOU, R2D2 (robot personality), K2 (Kashmir mountain), tv.

DNA is a unique member of the group of self-replicating words in that its referent is itself self-replicating. Further study may reveal other species of self-replicating words.

Opposing self-replication, another form of reflexivity in words is self-destructiveness, where a word (usually a verb) calls attention to itself by supplying a formula for destroying or damaging itself: delete, redline, misspell, overtype, replace. Self-destructive words comprise a subset of a larger class of words possessing the reflexive property of self-modifiability. A self-modifying word is one that supplies a formula for modifying itself, thereby inviting that modification: alphabetize, capitalize, anagrammatize, italicize. Self-modifying words, in turn, comprise a subset of an even larger class of words possessing the more fundamental reflexive property of self-applicability, wherein a word (especially a transitive verb) calls attention to itself by indicating an action conceivably and often aptly performable on itself: duplicate, define, pronounce, whisper, classify, read.

The property of reflexivity in words warrants further study. Like living things, words can call attention to themselves. It has been said that words are the texturally richest and most refined of the symbols we use to express ourselves into existence. Indeed, some words contain the seed to express even themselves into existence, and others the seed to destroy themselves.

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