

Parts of Speech — Things, Processes, Qualities, and Relationships and Radial Categories

Students can be dismayed by the fact that the same word can be used as different parts of speech. For example, when we define a noun as the name of a person, place, or thing, that definition would surely seem to make *stone* a noun, for what could be more thing-y than a stone? But then in a sentence like "He ran into a stone wall" *stone* is used as a modifier since it describes the kind of wall that was run into. And in "Those people said they would stone the thief," *stone* is being used as a verb. And in the phrase "stone cold killer" it modifies the adjective *cold* and is thus an adverb. So is *stone* a noun or not? The answer, alas, is "Yes it is – but it can also be an adjective, a verb, or an adverb." And thus the confusion and dismay.

Underlying what we call the parts of speech there are four basic constructs that we use in thinking about the world as we experience it: We can think about our experienced world in terms of two kinds of structures: those that we are treating as if they were static and unchanging and those that we are treating as if they were changing through time. We can define *structure* as anything whose various parts and aspects seem to us to be related one with the other enough that we can experience them as "sticking together" so as to form unified wholes.

Structures we experience as relatively static and unchanging we call **things**.

Structures we experience as undergoing change through time we call **processes**.

Both things and processes have **qualities**, and they have **relationships** between or among them. We can treat these as the four radical components of the world as we experience it:

- (i) **things**,
- (ii) **processes**,
- (iii) the **qualities** of things and processes,
- (iv) the **relationships** between and among things and processes.

In English we have categories of words that typically refer to these four

radical components. These categories of words are the **parts of speech**. At the most basic level the following five propositions define the six main parts of speech:

- (i) Words that refer to **things** are called **NOUNS**.
- (ii) Words that refer to **processes** are called **VERBS**.

Since things and processes can each have qualities, the words that we use to refer to these two kinds of qualities make up two more parts of speech:

- (iii) Words that refer to the **qualities of things** are called **ADJECTIVES**.
- (iv) Words that refer to the **qualities of processes** are called **ADVERBS**.

And since we can establish relationships between and among things or processes or the qualities of things and processes, we get two more parts of speech:

- (v) Words that refer to the **relationships between and among things, processes, and their qualities** are called **CONJUNCTIONS** and **PREPOSITIONS**.

The relationships as summarized above are base-line, or prototypical, even stereotypical. They are the original and central functions of these words. But there is a great creative principle in English grammar that allows us to adapt or adopt words that are prototypical members of one of these six parts of speech so that they can be used to refer to radical components other than the one to which they prototypically refer. This process is often called **conversion**.

Sometimes when we make use of conversion, we actually change the pronunciation or spelling (or both) of the word to mark the shift, in which case it is called *derivation*. Thus the adjective *simple* which normally refers to qualities of things, can be converted via derivation to a noun that refers to a thing itself, although a quite abstract thing: *simplicity*. It also can be converted via derivation to refer to a process, or function as a verb: *simplify*. And it can be converted via derivation to refer to a quality of a

process, or function as an adverb: *simply*.

These instructions are not **simple** enough.

We must increase their **simplicity**.

We must **simplify** them.

Then they can be used more **simply**.

Sometimes when we make use of conversion, we change the pronunciation but not the spelling. For instance, the verb *convict*, [kən-viktʃ], with stress on the second syllable, by the 16th century was converted to a noun with the stress shifted to the first syllable, [kon'-vikt]. You can hear the stress shift, and the concomitant change in the sound of the vowel spelled by the <o>, if you say aloud a sentence like, "The surely did convict the convict."

And often we use conversion with no change at all, in either the pronunciation or the spelling, which is the case with our original example, *stone*. The *Oxford English Dictionary* records the noun *stone* as early as the 9th century. Almost that early it was converted to be used as a modifier (that is, attributively) as in phrases like "a stone wall." Soon thereafter, at most by the 12th century, it was converted to a verb, as in "to stone the thief." And even later it was used as an adverb meaning something like "utterly, completely" as in "stone certain" and "stone cold."

It is this kind of unmarked conversion that can make identifying the parts of speech the trial that it can be for students, and can trigger frustrated questions like, "Well, is *stone* a noun or not?" The answer of course must be, "Yes, sometimes it's a noun, when it is referring to a thing. But it can also be a verb, when it is referring to a process. And it can be used like an adjective when it refers to the quality of a thing or like an adverb when it modifies an adjective."

This multiple use through conversion is not simple perversity. It is rather the result of a very powerful and useful creative principle in the language. This principle is perhaps easier to see in the semantics of the language: A

living language like English, which is always currently the product of the past, is constantly being asked to deal with new situations. If we had to create new words for every new experience, two undesirable things would result: (i) We would mute and lose certain strands of unity and similarity as related things and qualities and processes got called by unrelated and dissimilar names, and (ii) we would end up with an unusably large lexicon. In time our language would contain so many and such highly specialized words that were always coming into and falling out of use that no one could keep up with the flux. So this process of conversion is a way of keeping down the total size of the lexicon while also reminding us of certain perceived similarities and unities among things, processes, qualities, and relationships. The result is a complicated dictionary entry for a word like *stone*:

n.: **1a.** Concreted earthy or mineral matter; rock. **b.** Such concreted matter of a particular type. Often used in combination: *sandstone*; *soapstone*. **2.** A small piece of rock. **3.** Rock or a piece of rock shaped or finished for a particular purpose, especially: **a.** A piece of rock that is used in construction: *a coping stone*; *a paving stone*. **b.** A gravestone or tombstone. **c.** A grindstone, millstone, or whetstone. **d.** A milestone or boundary. **4.** A gem or precious stone. **5.** Something, such as a hailstone, resembling a stone in shape or hardness. **6.** *Bot.* The hard covering enclosing the seed in certain fruits, such as the cherry, plum, or peach. **7.** *Pathol.* A mineral concretion in an organ, such as the kidney or gallbladder, or other body part; a calculus. **8.** *pl. stone* A unit of weight in Great Britain, 14 pounds (6.4 kilograms). **9.** *Print.* A table with a smooth surface on which page forms are composed. – *adj.* **1.** Relating to or made of stone: *a stone wall*. **2.** Made of stoneware or earthenware. **3.** Complete; utter: *a stone liar*. – *adv.* Used as an intensive. Often used in combination: *stone cold*. – *trans. v.* **stoned, ston-ing, stones** **1.** To hurl or throw stones at, especially to kill with stones. **2.** To remove the stones or pits from. **3.** To furnish, fit, pave, or line with stones. **4.** To rub on or with a stone in order to polish or sharpen. **5.** *Obsolete.* To make hard or indifferent.

Think of the notion of family resemblance: It is fairly common for the members of a family to all resemble one another even though you cannot pin down any one feature that they all have in common: Sally has her mother's eyes and her father's nose; her brother Billy has her mother's nose and her father's eyes, and so it goes. The same thing can be true of categories that we refer to with words: The members of the category may all resemble one another but we can't pin down any one feature that they

all share. So, too, polysemic words like *stone*. (*Polysemic* is from the noun *polysemy* and means "having more than one meaning or definition." Just about every word in the English language is polysemic to some degree.) But there are always strands of family resemblance.

The grammatical conversion that allows us to extend the use of a noun like *stone* in order to use it as a modifier and a verb is rather like polysemy in the semantics of the language. Grammatical conversion and polysemy seem to me to be species of a more general tendency of nature and evolution — and the human mind. This tendency is basically to adapt something that was designed for one purpose so that it can be used for another purpose that may be quite different from the original. This adaptation and improvisation is a great principle of nature and the mind. Ingenious improvisation is common in biological and cultural evolution. An example that straddles the line between biology and culture is the development of the human speech apparatus: None of the parts were originally designed for the production of speech. The separate parts of what we think of as the vocal apparatus — for instance, the lips, the teeth, the palate, the tongue, the larynx, the lungs — started out with other purposes, which for the most part they still maintain, and the speech-producing function was added on through a process of ingenious improvisation, a grand cobbling together, almost Rube-Goldberg fashion. Then the new speech function introduced pressures for new changes: Consider, for instance, the complex adjustments that had to be made in the way humans use their lungs in order to accommodate the demands of speech production. And we are just beginning to understand some of the changes that we believe have been made by the advent of speech on the biology of the brain.

One indication of the ubiquity and naturalness of the sort of improvisation represented by conversion of words from one part of speech to another is the fact that conversion can be quite ad hoc and at times even startling, and yet still understandable. We can say things like "Don't you but me no buts" and be understood, even though in such a sentence we are using a conjunction as a verb and noun. If you were playing tennis and your opponent called one of your shots out, a shot that you felt was clearly in, you could register your disagreement by saying, "Don't you out me no

outs!" and be understood. Even though the exact semantics of such a statement could be a bit tricky, the meaning is clear enough, as is the syntax: *out*, which is normally used as a preposition or modifier, is here being used as a verb and as a plural direct object, or noun.

New technologies are particularly inclined to spawn new conversions. For instance, computer users have converted nouns like *format* and *input* into verbs. The purists may squawk about such conversions, but the language will have its way: The useful conversions will survive; those that are not worth the trouble will disappear.

So far, then, we have made two points about the parts of speech:

The first point is that at the heart of our parts of speech are four radical components of our experienced world: things, processes, qualities, and relationships. The categories of words that make up the various parts of speech are used to refer to these components — respectively, nouns, verbs, modifiers (adjectives and adverbs), and joiners (conjunctions and prepositions).

The second point is that once these prototypical categories have been defined, the process of conversion allows us to use a word from one part of speech as a member of another part of speech, converting it for a use different from its prototypical use — thus, for instance, the many uses of the word *stone*.

A third point, yet to be made, is that although all nouns refer to things that are thing-y — like stones — some nouns refer to things that are thing-ier than others. More generally, some members of a category are better examples of that category than are others. The category may be clearly defined, but some members may represent the category better than others. Cognitive psychologists have shown, for instance, that most people feel that a robin is a better example of a bird than is an ostrich or a penguin. All three are birds, clearly and unambiguously, but some birds are better birds, or in a way bird-ier than others.

This phenomenon implies that categories don't exist as undifferentiated groups of things and that instead we have a kind of prototype in mind that represents the center of the group, the birdiest of the birds, the thing-iest of the things, the noun-iest of the nouns. And we place members in the category to the extent that they match or don't match the prototype. Robins are toward the center of the bird category, while ostriches and penguins are out towards the border. So however we define the category of birds formally, as we experience the category, some birds are birdier than others.

In the same way some nouns are nounier than others. Most people would agree that words that refer to things that are physical and concrete and that we can see or taste or touch are nouns, like *stone*. We run into problems with mental abstractions like *left-handedness* and *implausibility*. But although we may define the original category of nouns with physical and concrete prototypes in mind, like stones and walls and such, once the category is defined, we can then expand it through a process rather like the adaptation and improvisation we discussed earlier. But here the operative principle is that even though mental abstractions may not be very thing-y, so they are not at all like our prototypical concrete and physical nouns, we can choose to think about them as things, which means that we can use them as nouns – as in sentences like *Left-handedness is less common than right-handedness*, in which the abstractions are used as the subject of a verb and the object of a preposition. Just as the process of conversion complicated the boundaries between our parts of speech, so too does the distinction between concrete and abstract complicate the boundaries of that category we call nouns.

So far we haven't said anything about the two remaining parts of speech: **pronouns** and **interjections**. Pronouns are a very important category, but at this point I'm inclined to treat them as a second-order category. Thus, nouns are a first-order category because they refer to things, one of the four radical components. Pronouns are a second-order category because they refer to a first-order category, nouns. Pronouns can also refer directly to things, through the process of coreferencing, but that complication depends upon their original second-order function. For example, in a phrase like "The man who is eating soup," we say that *man*

and *who* **corefer** to the same thing, the same human adult male individual, but *who* could not refer to this thing if *man* were not also doing so. A similar thing is going on with interrogative pronouns, as in "Who is that man?" and somewhat more indirectly, "Who is the villain here?" Expletives and so-called existential pronouns ("**There** is a fly in my soup!" and "**It** is raining") function as place-markers, a function that I suspect can also be seen as depending upon their original second-order function.

Interjections seem to me to be a relatively unimportant category (though they may help us understand the evolution of truly symbolic words, since they exist somewhere between the more primitive sign and the full-fledged symbol). At this point I'm also inclined to treat interjections as special kinds of adjectives and, more commonly, adverbs.

To summarize: At the heart of our parts of speech are the four radical components of our experience of the world (things, processes, qualities, and relationships) and the primary grammatical categories that line up with them (nouns; verbs; adjectives and adverbs; and conjunctions and prepositions). Pronouns are probably best thought of as a secondary category. And interjections can probably best be thought of as special kinds of adjectives and adverbs, though the fact that they can be something less than fully symbolic makes them an interesting special case.

Once the primary categories are established, words can be converted to function grammatically as members of other parts of speech, rather the way the meanings of words can be extended to cover new cases and situations, as was illustrated with the polysemy in the word *stone*.

cardinal:

- aj: 1. Of foremost importance. 2. Of a dark to deep or vivid red color.
- n: 1. A member of the Sacred College or College of Cardinals. 2. Dark to deep or vivid red. 3. A North American bird, *Richmondena*

cardinalis. 4. A short, hooded cloak.. 5. A cardinal number [used to indicate quantity but not order].

Concentrating on the noun senses of the word, and according to the *AHD*, the category of things that can be referred to with the word *cardinal* includes members of the Catholic hierarchy, colors, birds, articles of clothing, and numbers. (Larger dictionaries give even more definitions.) There is no single feature that all these things have in common, but there are a couple of attributes that form strands of family resemblance among them: the notion of being most important and the notion of being red, like the cloaks of the Catholic cardinals, who were the most important, or cardinal, bishops.