

Words and Some of Their Ways

Some years ago at Central Washington University a student from Iran took our remedial spelling class. Afterwards he said that it had been a very useful class for him. It had helped him improve his spelling, but it also had helped him understand how English words work. He felt that he now understood the structure of English words enough that English vocabulary and spelling were no longer quite the mysteries they had been before. Or as he put it, "It helped me see how words go together, the whole thing." That student's experience has something to tell us about teaching vocabulary and spelling.

Elements, Particles, and Procedures

That spelling class dealt with the formal and semantic structure of written words and how they work. Students learned to analyze words into their **elements**: the smallest parts of written words that add meaning to the words. There are three different kinds of elements: **prefixes**, **bases**, and **suffixes**. In general, prefixes go at the front of words. Bases go in the middle, as the word's core of meaning. And suffixes go at the end. A word like *unpainted* has a prefix, a base, and a suffix. The prefix is *un-*. The base, *paint*, is itself a word and is thus a **free base**. And the suffix is *-ed*: *un + paint + ed*. Two free bases can be combined to form **compound words**: *black + bird = blackbird*, or *pop + corn = popcorn*. The word *prediction* also has a prefix, *pre-*, and a suffix, *-ion*. Its base, *+dict*, cannot stand free as a word and is thus a **bound base**.

Some words also contain **particles**. Unlike elements, particles do not add meaning to words—though they do serve other purposes. Examples of particles are the linking *o* in the middle of a word like *speedometer*: *speed + o + meter*. Another kind of particle is the *n* that is inserted in a word like *twinning* when we add the suffix *-ing* to the free base *twin*: *twin + n + ing*.

When we combine elements to make written words, we use a small number of **procedures**. The most important is **simple addition**, which tells us that unless we know of a specific reason to make a specific change, we should simply add the elements together, without making any changes in their spelling. For instance, the elements in words like *blackbird* and *unpainted* simply add together, with no changes: *black + bird* and *un + paint + ed*. If you can spell the little short elements that make up the word, you can spell the whole word. Far and away, most of the time when elements combine in English, they do so by simple addition.

Another important procedure is **twinning**, as in the word *twinning* itself. When you combine the word *twin* and the suffix *-ing*, you can't use simple addition, because if you did, you would get *t-w-i-n-i-n-g*, which spells *twining* [ˈtwī-nīŋ], with a long [ī]. The first *i* in *twining* is long because it heads a vowel-consonant-vowel (VCV) string, which regularly marks long vowels. Since the first *i* in *twinning* is short, [ˈtwɪn-ɪŋ], we twin the final consonant by adding a particle *n*: *twin + n + ing = twinning*, to give us a VCCV

string, which regularly marks short vowels.

Another procedure is **final-e deletion**, which tells us to delete silent final-e's when we add suffixes that start with vowels. For instance, when we add the suffix *-ion* to the word *delete*, we delete the final-e: *delete + ion = delet~~e~~ + ion = deletion*.

There are a few other procedures. One is **assimilation**: When the prefix *ad-* is added to a free base like *claim*, the *d* in *ad-* assimilates to, or grows more similar to, the *c* in *claim*. In fact, the *d* is replaced with a *c*: *ad + claim = ad + c + claim = acclaim*.

That Iranian student, I believe, felt as he did about that spelling class because in it he learned something about elements, particles, and procedures, and thus he learned something about the structure of words. Before the class, when he looked at English words, he saw only strings of letters, more or less blurred together. When he heard the words, he heard only strings of sounds, also blurred together. English words were for him single, isolated things that he memorized one after another. They were not yet something with a structure and a way of working that he understood, so he could see no patterns or unities among them.

But after the spelling class, he could recognize common elements: prefixes, free and bound bases, and suffixes. He could see certain procedures at work -- like simple addition, twinning, final-e deletion, and assimilation. The more you know about something, especially about its structure and inner relationships, the more you can see and hear in it. The more you know about, say, classical music, the more you can hear in a symphony. And the more you know about the structure of words and how they work, the more you can see and hear in them. So you have more to remember them by. And that is why it is important to find ways of teaching English spelling and vocabulary that help the students better understand the structure and patterns in English words.

I believe it is important to give students a lot of chances to analyze words into their elements. We should give them many words like *unpainted* that start out with a simple free base and then add prefixes and suffixes via simple addition, as in *friend*, *friendly*, *unfriendly*. The students should get many chances to take such words apart. And they should get many chances to put them back together again. They should get steady practice in both analyzing and constructing words.

Prefixes and Their Ways

Once the students begin to recognize elements and procedures, we can help them work with various kinds of word clusters and give them many chances to analyze and construct words that involve those procedures. For instance, that *ad-* prefix that assimilates to *ac-* in the word *acclaim* assimilates to a number of different spellings and pronunciations. A good first step in analysis would be to show what happened to the *ad-* in each word in a list like the following:

Table 1.

account	alloy	appoint	assist	announce
allude	appear	assure	affair	ally
arrest	attack	affect	annex	arrive
attempt	aggress	apply	assault	attract

We could give the students a start: *account* = *ad* + *c* + *count*, and then let them analyze the others. (You might take a few minutes to try such an analysis now.) After they had worked through the list, analyzing the words into their prefixes and bases, we could take the list away from them and give them prefixes and bases to combine into words: *ad* + *sist* = ? The answer would be: *ad* + *sist* = *ad* + *s* + *sist* = *assist*

And we could give them the parts that they needed to make new words that were not on the original list: *ad* + *celerate* = ? *ad* + *point* = ? Among other things, they would come to understand why there are double consonants toward the front of so many words.

Bases and Their Ways

Now that students have begun to recognize patterns in word clusters, we can have them work with clusters of other types of words -- for instance, those that have the same base. Many words in English contain the bound base +*fer*:

Table 2.

differ	offer	proffer	suffer	infer
differed	offered	proffered	suffered	inferred
differing	offering	proffering	suffering	inferring
difference	offerer	proffers	sufferer	inference

defer	prefer	confer	refer
deferred	preferred	conferred	referred
deferable	preferable	conferrer	referendum
deferential	preference	conferrable	reference

deference preferential conference referential

There are many useful things to do with an orderly list like this. For instance, what can we say about the meaning that *+fer* adds to the different words in this list? It's easier if we think about the meanings of the prefixes and bases together. For instance, the dictionary tells us that the prefix *re-* means "back, again": If you repay someone, you pay them back; if you repaint something, you paint it again. The dictionary's etymology of, say, *refer*, tells us that the earlier meaning of the bound base *+fer* was "carry, bring, bear." So the earlier meaning of *refer* must have been something like "carry back" or "bring back." And when you think about it, "carry back" is not a bad way to define *refer*. When we say, for instance, that a certain pronoun refers to a certain noun, we are saying that the pronoun carries our thought back to that noun. When an issue has to be decided by a vote of the people, it is called a referendum. The issue has been carried back to the people for their vote and decision.

A word like *suffer* is more complex. For one thing, *suf-* is an assimilated form of the prefix *sub-*. The dictionary tells us that *sub-* usually becomes *suf-* before bases that start with *f*. *Sub-* assimilates in different ways in several words, for instance:

Table 3.

suffer	suppose	supply	summon
suggest	suffuse	suffrage	suffix
support	succinct	success	suppress

So the students can get another lesson in assimilation, and in analyzing and constructing words.

The prefix *sub-* usually means "under, below," as in *subnormal*. But it also means "up from, up from under." That is its sense in *suffer*: the bound base *+fer* means "bear" and the prefix means "up from under." So the early meaning of *suffer* was "bear up from under"; today we would say "bear up with, put up with." When you suffer something or when you suffer from something, you must bear up under it.

Suffixes and Their Ways

Once we get the words arranged in tidy lists, there are all kinds of questions we can ask about them. There are all kinds of things we can have students do with them that will help them better understand English spelling and vocabulary. Consider, for instance, word stress and its effect on spelling: Notice that when you add *-ence* to *infer* to spell

inference, you use simple addition: *infer* + *ence*. But when you spell *inferring*, you use twinning: *infer* + *r* + *ing*. You twin to avoid the VCV string you'd get in i-n-f-e-r-i-n-g and thus keep the *e* from looking as if it should be long, the way it is in, say, *interfering*. But why don't we twin in *inference*? It has to do with stress: A final consonant is twinned only if there is stress on the syllable it is in before and after you add the suffix. In the word *infer* the stress is on the syllable the *r* is in: It is [in ˈfɪr], not [ɪn·fr]. And the stress stays on that syllable in *inferring*, [in ˈfɪr·ɪŋ]. But when we add the suffix *-ence* to *infer* to spell *inference*, the stress moves off the syllable the *r* is in and onto the first syllable of the word: It is [ɪn·fr̩ns], not [n ˈfɪr̩ns]. So we twin the *r* when we spell *inferring* but not when we spell *inference*.

Here is a list of pairs of words with the suffix *-ity*:

Table 4.

serene, serenity	grave, gravity	profane, profanity
divine, divinity	inane, inanity	sane, sanity
extreme, extremity	malign, malignity	sublime, sublimity

The first word in each pair is an adjective, and the second is a noun. Thus we would speak of "a serene evening" with the adjective *serene*, but we would speak of "the serenity of the evening" with the noun *serenity*. So we can say that the suffix *-ity* changes adjectives into nouns. And with enough careful questioning we could even get the students to see that the suffix *-ity* adds the meaning "the state of being whatever the adjective says." Serenity is the state of being serene. This seems to me to be a very good and useful kind of structured vocabulary study.

Then we can discuss what might at first seem to be one of English spelling's notorious so-called "exceptions": We can ask the students to listen to the vowels in the adjective and noun in each of the pairs in the list above: For instance, is the vowel in the adjective *grave* long or short? It is long, [a]. Is that same vowel long or short in the noun *gravity*? It is short, [a]. *Grave* has a long sound, [a], but after we add the suffix *-ity*, the noun *gravity* has a short sound, [a]. We can help the students see that that shift occurs in each pair in the list. By now the students should be able to see that the suffix *-ity* regularly has a short vowel right in front of it. However, they have already learned that in VCV strings the first vowel will be long, and the *a* in *gravity* heads a VCV string and is short. It would appear to be an exception to the VCV rule, but actually it is not. We have two rules at work here: the more general VCV rule leading us to expect a long vowel, and the more local *-ity* rule leading us to expect a short vowel. The local *-ity* rule takes precedence; it preempts the more general VCV rule—always. So there is no real exception here at all, simply a case of a general rule being preempted by a more local one.

A Brief Real Reading Example

A large part of teaching advanced reading is keeping the students engaged with the text long enough for it to reveal itself to them. The word study described here can help. Here are some opening sentences from the whitewashing episode in *Tom Sawyer*:

Table 5.

Tom appeared on the sidewalk with a bucket of whitewash and a long-handled brush. He surveyed the fence, and all gladness left him and a deep melancholy settled down upon his spirit. Thirty yards of board fence, nine feet high. Life to him seemed hollow, and existence but a burden. Sighing, he dipped his brush and passed it along the topmost plank; repeated the operation; did it again; compared the insignificant whitewashed streak with the far-reaching continent of unwhitewashed fence, and sat down on a tree-box discouraged.

Consider these words that deal with Tom's mood: *gladness, melancholy, spirit, discouraged*. The etymologies in a good dictionary can tell us much: With older students we could point out that earlier meanings of *glad* were "bright, shining, beautiful," and that the base of *melancholy*, *+melan*, means "black," so Tom's moods go from bright to black, from shining to dark. The original sense of the base *spir* in *spirit* was "breathe." So when that black melancholy settles down upon Tom's spirit, it is as if he finds it hard to breathe. And since the base *cour* in *discouraged* originally meant "heart," he is left, as it were, with his breath and his heart taken away. With younger students we could simply compile lists of words with the same elements as some of those in the passage: *Gladness* suggests a huge list of other words with suffix *-ness* (which is a synonym of *-ity*): *sadness, blackness, brightness, hollowness, etc.* The base *+spire*, a variant of the *spir* in *spirit*, leads to other "breathing" words: *inspire, expire, perspire, transpire, conspire, etc.* On it can go, with relevant lists of words for the students to analyze and reconstruct.

We could go on, leading the student to see other patterns at work in English words. But perhaps the foregoing is enough to illustrate the point I want to make: Though teaching vocabulary and spelling is always difficult, one strategy that helps is analyzing words into their elements, particles, and procedures, and then using those elements, particles, and procedures to construct new words. Over time, the students discover the many and complex, but lovely, patterns that are at work in the English lexicon. For patterns reveal unities, and unities provide simplifications. As the experience of our Iranian student confirms, the careful study of clusters of words, paying particular attention to what happens to the elements when they combine in various ways, can be a strategy of great power and usefulness.