Twinning
From *Spelling for Learning*

A word like *tapping* can be analyzed into the stem *tap* plus the suffix *-ing*), with a <p> inserted between the stem and suffix: *tapping* = tap + p + ing). A word like *taping* can be analyzed into the stem *tape* plus the suffix *-ing*), with the <e> in *tape* deleted: *taping* = tapé + ing). In Table 3.1 the words in the left column are analyzed to show any changes that occurred. Each of the sets of three words contains two different stems, which are listed in the right column. In the Words column the underlined letters are letters that have been inserted. The V's and C's will be explained later:

Table 3.1

Words	Analyses	Stems
CVCC̲V shamm̲ing	sham+m+ing)	sham
VCV shaming	shamé+ing)	shame
shameful	shame+ful)	
CVCC̲V scrapp̲ed	scrap+p+ed)	scrap
VCV scraped	scrapé+ed)	scrape
scrapes	scrape+s)	
CVCC̲V ridd̲ance	rid+d+ance)	rid
rids	rid+s)	
VCV ridable	ridé+able)	ride
CVCC̲V bidd̲er	bid+d+er)	bid
CVCC̲V bidd̲able	bid+d+able)	
VCV biding	bidé+ing)	bide

The analyses in Table 3.1 lead to the following conclusions. If any of them are not

evident to you, check them against the table:

    1. In the words in which a letter is inserted, the inserted letter is a twin to the final letter of the stem.

    2. The stem of each word in which insertion occurs contains one syllable, or one vowel sound.

Now go back to Table 3.1 and look at the underlinings and **v**'s and **c**'s, which demonstrate the following conclusions:

    3. Each inserted letter is preceded by the sequence **cvc** (consonant-vowel-consonant), in which the vowel is short, as is the vowel in the stem.

    4. The suffix after each inserted letter starts with a vowel.

    5. **A First Twinning Rule:**   You twin the final consonant of a stem that has one syllable, or vowel sound, and ends with the string **cvc** when you add a suffix that starts with a vowel.   **Exercise 3.2, p. 107**

Two Important Patterns: vcc **(vowel-consonant-consonant) and** vcv **(vowel-consonant-vowel).** Now in Table 3.1 examine the words in which a letter is deleted. The words in the table should demonstrate the following conclusions:

    6. The **vcv** pattern occurs in all the words in which a letter is deleted, and the first vowel in the **vcv** pattern is always long, as is the vowel in the stem.

    7. The **vcc** pattern occurs in all the words in which twinning occurs, and the vowel in the vcc pattern is always short, as is the vowel in the stem.

The **vcv** and **vcc** patterns, which mark long and short vowels respectively, motivate the twinning procedure in English spelling: We twin in order to keep the preceding short vowel "looking" short. Twinning gives us the **vcc** pattern and avoids the **vcv** pattern when adding a suffix that starts with a vowel.

                                             VCV

If we didn't twin, we would get $sham + ing$ = *<shaming>, with the long vowel sound, [ā], which is the wrong pronunciation.

                                             VCC

But when we twin, we get $sham + m + ing$ = *shamming*, with the short vowel sound, [a], the correct pronunciation.

Expanding the Twinning Rule. We now have a first twinning rule that is accurate for stems that are one syllable long and that end **cvc**, a string in which the vowel is regularly short. To write a more comprehensive final rule we need to look at a wider

variety of words.

The word *vowel* can refer either to a sound or a letter. The stems in Table 3.2 all contain a single vowel sound spelled with more than one vowel letter. Notice what happens (or doesn't happen) when the suffixes are added to the stems to form longer words:

Table 3.2

Stems	Suffixes	Longer Words
dead	-er), -est), -en)	deader, deadest, deaden
cook	-able), -ery), -ed)	cookable, cookery, cooked
deaf	-er), -est), -en)	deafer, deafest, deafen
brawl	-ing), -ed), -y)	brawling, brawled, brawly
fraud	-ulent)	fraudulent
broad	-est), -en)	broadest, broaden
daub	-er), -y), -ed)	dauber, dauby, daubed
blood	-ed), -ing), -y)	blooded, blooding, bloody
gawk	-ish), -y)	gawkish, gawky
taut	-est), -en), -er)	tautest, tauten, tauter

Table 3.2 demonstrates that you do not twin the final consonant of a stem that contains a single vowel sound spelled by two vowel letters: It's *deader*, not *<deadder>.

The stems we've discussed so far have all ended with a single consonant letter that spelled a single consonant sound. All but two of the words in Table 3.3 end in one consonant sound that is spelled with two or three consonant letters. The other two words end in a combination of two consonant sounds spelled with a single consonant letter:

Table 3.3

Stems	Suffixes	Longer Words
bomb	-ed), -er), -ard)	bombed, bomber, bombard
yacht	-ing), -ed)	yachting, yachted
fix	-ate), -ity)	fixate, fixity
graph	-ic), -ite)	graphic, graphite
stick	-er), -y), -ier)	sticker, sticky, stickier

Stems	Suffixes	Longer Words
talk	-ative), -y)	talkative, talky
rock	-iest), -er), -y)	rockiest, rocker, rocky
fox	-ed), -ing), -y)	foxed, foxing, foxy
myth	-ical), -icize)	mythical, mythicize
rich	-er), -est), -en)	richer, richest, richen
flash	-ed), -ing), -y)	flashed, flashing, flashy

Table 3.3 demonstrates the following:

1. The single consonant letter that spells a combination of two consonant sounds is <x>, which spells [ks] at the end of words. (Notice that both [k] and [s] are voiceless sounds; in some words, especially when it is surrounded by voiced vowels, <x> spells the corresponding voiced consonant combination [gz]: *exist, examine, auxiliary*.)

2. When adding a suffix that starts with a vowel, you do not twin consonants that consist of two letters or two sounds. (You might try twinning some of these — and see what funny-looking spellings you get: *<bombmbing>, *<richcher>, *<yachtchting>.)

3. **A Revised Twinning Rule:** You twin the final consonant of the stem when you add a suffix that starts with a vowel to a stem that has just one vowel sound and that ends in a single vowel sound and letter followed by a single consonant sound and letter.

Primary Word Stress. In words with two or more syllables some vowel sounds are usually louder than others. For instance, in *alone* the second vowel sound, [ō], is louder than the first, [ə]. In *bacon* the situation is reversed: The first vowel sound [ā], is louder than the second, [ə]. These different degrees of loudness are word stress. The loudest sounded vowel in a word is said to bear primary stress. When it is significant, we will print vowels with primary stress in large boldface: *al**O**ne* and *b**a**con*.

Each word below contains two vowel sounds. In each one the vowel with primary stress is in large boldface. Read each word aloud, being sure you hear the stress difference. If you find it hard to hear primary stress, here is a hint that may help: Exaggerate the difference in stress between the vowel sounds. For instance, in a word like *lovely*, pronounce the first vowel sound very loud and the second very soft: "LOVE-ly!" Then try it with the first syllable very soft and the second very loud: "love-LY!" You should find that one version sounds less grotesque than the other. The less grotesque version is the one with the proper stress pattern.

Table 3.4

barren	foreign	compel	alive
achieve	hoping	really	leisure
exceed	descent	decent	region
fiery	conceive	written	relieve
equip	likely	decide	exist

And remember: The pronunciation your dictionary gives of your word includes the proper stress pattern.

Some words in English have one stress pattern when they are used as nouns and another when they are used as verbs. The following sentences contain examples. Pronounce each pair of sentences, listening carefully to the stress differences in the pairs of words printed in italics:

Table 3.5

1a. Doris and Bob's oldest son is a real *rebel*.
1b. He will *rebel* against most anything.

2a. There has been an *increase* in crime lately.
2b. Do you think it will *increase* even more?

3a. He used to be a *convict*.
3b. When did they *convict* him?

4a. That farm grows a lot of *produce*.
4b. What do they *produce* besides cabbage?

5a. This present is an *insult*!
5b. Why did he *insult* her so?

6a. When did they *present* you with the gold watch?
6b. That *present* is an insult!

Table 3.5 demonstrates that in such noun-verb pairs, primary stress falls on the first vowel sound of the noun but on the final vowel sound of the verb. In general, English prefers the strong stress close to the front of the word, which explains the strong stress at the front of noun stems. But English also likes to alternate quite regularly between weaker and stronger stress. Since verbs often have weakly stressed suffixes like *-ing, -ed,* and *-es* added to them, it makes sense to have the stress on the final syllable of the verb, to avoid having two consecutive weak syllables— which explains the strong

stress at the end of verbs stems. (It is the tendency to alternate fairly regularly between weaker and stronger stress that makes the iambic meter so natural to English poetry.)

In Table 3.6 all of the words in the Stems column end with a single consonant letter that is spelling a single consonant sound and is preceded by a single vowel letter. All the stems contain two vowel sounds, or syllables. The derived and inflected words are formed by adding suffixes to the stems. Vowels with primary stress in each word are in large boldface, and inserted twin consonants are underlined. Pronounce all the words in the table carefully, listening for primary stress:

Table 3.6

Stems	Derived and Inflected Words		
def**e**r	def**e**rred	d**e**ference	def**e**rment
beg**i**n	beg**i**nning	beg**i**nner	beg**i**ns
contr**o**l	contr**o**lled	contr**o**lling	contr**o**ller
comm**i**t	comm**i**tted	comm**i**ttee	comm**i**tment
f**i**nal	fin**a**lity	f**i**nalist	f**i**nally
l**i**mit	l**i**mited	limit**a**tion	l**i**mitless

Table 3.6 demonstrates that in stems with two vowel sounds, you twin the final consonant only when there is stress on the final vowel sound of the stem both before and after you add the suffix.

In Table 3.6 one-third of the stems have stress on the first vowel, two-thirds on the final vowel. That distribution is not typical of English. Like nouns, two-syllable adjectives and adverbs tend to have strong stress on the first vowel,—as do many two-syllable prepositions, like *after* and *under*— so stress falls on the first vowel of most two-syllable English words.   **Exercise 3.3, pp. 108**

Secondary Stress. So far we've spoken in terms of only two levels of word stress: primary and weak. Most dictionaries show three levels of stress: primary, secondary, and weak. Primary is the heaviest; weak is the lightest, and secondary is the one in the middle. We will not mark vowels with weak stress, but we will print vowels with secondary stress in normal size bold.

Each word in Table 3.7, whether it contains two vowel sounds or three, contains just one primary stress. Most contain a secondary stress. Notice that as the position of primary and secondary stress shifts in words, there is often a shift in meaning, just as the meanings shifted in words like *r**e**bel* and *reb**e**l* in the sentences in Table 3.5. For instance, *overfl**OW*** is a verb, but ***O**verflow* is a noun.

Table 3.7

Stems	Derived and Inflected Forms		
c**i**rcular	circul**a**rity	circul**a**rize	c**i**rcularly
overl**a**p (vb.)	**o**verl**a**pped	**o**verl**a**pping	**o**verl**a**ps
overr**u**n (vb.)	**o**verr**u**nner	**o**verr**u**nning	**o**verr**u**ns
h**u**mb**u**g	h**u**mb**u**gged	h**u**mb**u**ggery	h**u**mb**u**gging
inh**e**rit	inh**e**rited	inh**e**ritance	inh**e**riting
liberal	**li**beral**i**sm	liber**a**lity	**li**beralness

Table 3.7 demonstrates the following:

1. In stems in which twinning occurs, the final vowel sound has either secondary or primary stress both before and after you add the suffix.

2. **The Final Twinning Rule:** You twin the final consonant of a stem if you are adding a suffix that starts with a vowel, and if the stem ends in a single vowel sound and letter followed by a single consonant sound and letter, and if there is at least secondary stress on the final vowel sound of the stem both before and after you add the suffix.

We assume that monosyllabic stems have primary stress.   **Exercise 3.4, p. 109**

Twinning and Variant Spellings.   Many words in English can be spelled correctly more than one way. Donald Emery's *Variant Spellings in Modern American Dictionaries* (NCTE, 1973) presents a list of more than 2,500 words that each have at least one variant spelling. Many of these sets of variants contain one spelling with twinning, one without.

Table 3.8 presents pairs of variant spellings, both of which are correct according to at least some dictionaries. The spelling that better fits the Twinning Rule is given in the "Better Fits" column. It stands to reason that if you have a good rule on one hand and choice of spellings on the other, you might as well choose the spelling that better fits the rule. The reason that variant better fits your Twinning Rule is spelled out in the "Reasons" column:

Table 3.8

Variant Spellings	Better Fits	Reasons
benefited benefitted	benefited	The <i> in *benefit* does not have secondary or primary stress.
busing bussing	bussing	Fits all the criteria of the twinning rule for one-syllable stems.
diagramed diagrammed	diagrammed	Fits all the criteria of the twinning rule for two-syllable stems
worshiped worshipped	worshiped	The <i> in *worship* does not have secondary or primary stress

If you check the words with variant spellings in the dictionary, you will find that some of the words also have variant pronunciations and stress patterns. So as you are deciding which spelling fits your Twinning Rule, you will also be deciding which pronunciation and stress-patterning you prefer.

Not all dictionaries agree on the acceptability of some variants. Notice that in the two-syllable stems that call for twinning, the final vowel of the stem is short. In those that do not, the final vowel tends to be reduced down to a schwa or a sound somewhere between schwa and short <i>. Twinning in stems with unstressed final syllables, as in *traveller* and *cancelled*, is more characteristic of British English spelling. In American English we tend to require at least secondary stress on the final syllable of the stem.

The injunction to choose the variant spelling that fits the rule is an example of *the Principle of Preferred Regularity*: "Faced with variants, a speller's most sensible approach would seem to be to choose the most regular. . . . By adhering to this principle, we assist the spelling system in its systemic evolution toward greater regularity and simplicity" (*AES*, p. 25). **Exercise 3.5, p. 109**