

Morphological Rules, p. 1

As observed in the textbook, there is no standard notation. However, the notation in the book, which is also the notation on this handout and the notation we will be using for the remainder of the course, is clear and straightforward. Standard or not, it is important to use the notation consistently.

Morphological rules are based on the concept of “lexical entry.” A lexical entry contains all the phonological, syntactic, morphological, and semantic information about a word.

As an example, let’s take the Hebrew word *takciv*.

$\left[\begin{array}{l} /takciv/ \\ N \\ \langle TAKCIV \rangle \\ \text{'budget'} \end{array} \right]$	← phonological representation
	← category/syntactic information
	← lexeme / inflectional information
	← meaning

Some points:

⇒ A lexical entry is a single element which represents all the properties of words (or morphemes, under the morpheme-based approach). As a single element, it is surrounded by square brackets: [].

⇒ The first line of the lexical entry is a phonological representation. It is first for practical reasons: it makes it easier to see what the word (or morpheme) in question is. As always in phonology, the phonological representation is enclosed in slashes: //. The textbook sometimes takes a shortcut and puts an orthographic (spelling) representation in the slashes instead of an actual phonological representation.

⇒ The next few lines include various pieces of morphosyntactic information: category, inflectional features, etc. NOTE: Inflection must be shown with features, e.g. [NUM PL], not ‘plurality of x’s’, despite what it says in Chapter 3. In the second edition of the book, see (5.20) on p. 109.

⇒ The last line is an informal representation of the semantics. It is possible to simplify, and include meaning only for the basic form of the lexeme (and not list the lexeme if there are no inflectional features).

Morphological rules relate word schemas, abstract lexical entries that represent groups of words. A word schema has the same elements as a lexical entry, and is also surrounded by square brackets. Two examples from the previous handout: The Hebrew rule relating *takciv* and *takcivi*, and the English rule relating *freeze* and *froze*.

$$\left[\begin{array}{l} /X/ \\ N \\ \text{'x'} \end{array} \right] \leftrightarrow \left[\begin{array}{l} /Xi/ \\ A \\ \text{'of x'} \end{array} \right] \quad \left[\begin{array}{l} /XiyC/ \\ V \\ \langle X \rangle \end{array} \right] \leftrightarrow \left[\begin{array}{l} /XowC/ \\ V \\ \langle X, [TENSE \quad PAST] \rangle \end{array} \right]$$

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As can be seen, variables are used in the phonological representation, the semantic representation, and the reference to the lexeme. As always, the variable has the same value on both sides of the rule. But there is no relationship between variables in different types of representations. In the phonological representation, variables refer to arbitrary sequences of phonemes. Use can also be made of C to refer to a single consonant, C* to refer to a sequence of consonants, V for a vowel, and parentheses for optionality. Other symbols can be invented as needed, such as N for a nasal consonant.

It is possible to make the notation more compact and include (some of) the morphosyntactic information as a subscript to the phonological form. It is better to write the information out in full on separate lines, but we will sometimes use the more compact version of the notation. If the semantics is not relevant and the more compact method of representing the morphosyntactic information is used, the lexical entry takes up a single line of text. For example, the rule for verbs like *freeze* can be written as follows:

$$[/XiyC/_V] \leftrightarrow [/XowC/_{V,PAST}]$$

However, it is still important to include the square brackets showing that these are (schemas for) lexical entries, and the slashes around the phonological representation.

Morphological Rules, p. 3

Consider the following forms in English.

NOTE: The phonological representations are approximate, and ignore a lot of details about the phonology of English.

	Citation Form		Past Participle
1.	sing /sɪŋ/	sung	/sʌŋ/
2.	cling /klɪŋ/	clung	/klʌŋ/
3.	fling /flɪŋ/	flung	/flʌŋ/
4.	ring /rɪŋ/	rung	/rʌŋ/
5.	spring /sprɪŋ/	sprung	/sprʌŋ/
6.	sting /stɪŋ/	stung	/stʌŋ/
7.	dig /dɪŋ/	dug	/dʌŋ/
8.	drink /drɪŋk/	drunk	/drʌŋk/
9.	shrink /ʃrɪŋk/	shrunk	/ʃrʌŋk/
10.	sink /sɪŋk/	sunk	/sʌŋk/
11.	spin /spɪn/	spun	/sprʌn/
12.	swim /swɪm/	swum	/swʌm/
13.	begin /bi:ɡɪn/	begun	/bi:ɡʌn/
14.	win /wɪn/	won	/wʌn/

Formulate the morphological rule relating these forms. In doing so, you might wish to consider the following forms as well. They are not due to the same rule, but there is some similarity between the rules they follow and the rule illustrated above.

15.	hang /hæŋ/	hung	/hʌŋ/
16.	run /rʌn/	run	/rʌn/
17.	come /kʌm/	come	/kʌm/
18.	sneak /sni:k/	snuck	/snʌk/
19.	strike /strayk/	struck	/strʌk/