

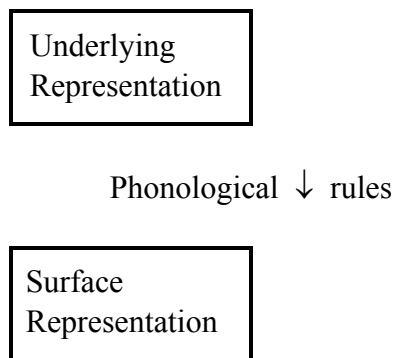
## Chapter 6: *Segmental change: an outline of some of the most common phonological processes*

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### 6.3. Voicing and devoicing

Assimilation involving the feature [+/- voice]. In a certain environment we can consequently witness the *voicing* or *devoicing* of a segment. Romanian typically voices the alveolar fricative [s] before a voiced sound as words of French origin like *zbir* (from *sbire*) or *zvelt* (from *svelte*) prove.

English plural and past tense allomorphy is phonologically conditioned. In other words, the form adopted by either the plural morpheme **s** or the past tense morpheme **ed** depends on the phonological environment and we should have an agreement in the feature voice between the root and the affix. We will remember that within a very influential approach in phonology – the generative one – the phonological component was considered to consist of two distinct levels: an underlying one, where an *underlying representation* (UR) was provided and a surface one where a *surface representation* (SR) of the respective structure was given. The transition from the deeper, underlying representation which was considered to be basic to the surface one which was considered to be derived, was performed by a number of phonological rules that converted the UR into the SR.



In the case we are discussing we have two options. Either we consider the form [s] as basic and derive the voiced allomorph from it, or we consider the voiced form to be the

one appearing in the underlying representation and postulate that the voiceless variant is derived from it. For reasons that will become clear later on, we will choose the second variant. We will then say that in the case of a noun ending in a voiced sound (with the exception of the voiced sibilants [z], [ʒ] and [ʒ]) – say, *bid* – when we add the plural morpheme that is voiced, because there is agreement in the feature [voice] in both the last sound of the base and the suffix, the underlying representation surfaces as such, without undergoing any change. If, however, we add the same suffix to a noun ending in a voiceless plosive or, in a number of cases, in the voiceless fricative [f] – e.g. *bit*, or *roof*, respectively – because the last sound of the noun is voiceless, a process of devoicing takes place as the suffix is assimilated by the voiceless obstruent in the root in the root.

[grid]	+	[z]	→	[gridz]
+voice		+voice	z → z	
			no change	
[grɪt]	+	[z]	→	[grɪts]
[klɪf]	+	[z]	→	[klɪfs]
-voice		+voice	z → s	
<i>progressive assimilation</i>			<i>devoicing</i>	

In the case of other nouns ending in [f], however, the process has the opposite effect, that is the fricative is voiced by the plural morpheme. Consider the formation of the plural of *wolf* and *wife*:

[self]	+	[z]	→	[selvz]
[laɪf]	+	[z]	→	[laɪvz]
-voice		+voice	f → v	
<i>regressive assimilation</i>			<i>voicing</i>	

A similar process of assimilation of the inflexion by the root applies when we add a past tense morpheme to a voiced or voiceless root. (Stems ending in t and d constitute an exception; see the illustration of vowel epenthesis below). Again we will consider the voiced form of the suffix to be basic. Thus, for the past tense of the verbs *rob* and *sip* we will get the following derivations:

[græb]	+	[d]	→	[græbd]
+voice		+voice	d → d	
			no change	
[rɪp]	+	[d]	→	[rɪpt]
-voice		+voice	d → t	
<i>progressive assimilation</i>			<i>devoicing</i>	

