

1 **Neutralization**

2 **Postscript**

3 **Chapter 19: The Power of Babelese**

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5

6 We have now considered quite a few approaches to neutralization in phonology, all the while
 7 slowing accreting arguments in favor of the overarching thesis that (1) neutralizing alternations
 8 are function-negative only to the extent that they derive homophones, (2) neutralizing
 9 alternations almost always maintain heterophony, and hence are usually function-neutral, and
 10 most surprisingly, (3) neutralization is often function-positive, by serving as an aid to parsing.
 11 Employing the specialized terminology used herein, phonological RHYME may readily increase
 12 until encountering a counter-pressure inhibiting undue decreases in phonological REASON, in the
 13 form of NEUTRALIZATION.

14 Our first tasks were to observe and describe (traditional) neutralization, the emphasis of Part
 15 One, Section A.

16 In Chapter Two we characterized neutralization as a topological deformation of the amount of
 17 phonetic distinctiveness across the speech stream—in terms of spans, edges, and points—
 18 observing that the speech signal consists of time periods with *more* linguistically significant
 19 information (the expression of contrastive cues) interwoven with time periods of *less*
 20 linguistically significant information (the suspension or loss of contrastive cues).

21 In Chapter Three we taxonomized the phenomenon by considering the contexts in which
 22 neutralizations—both oral and laryngeal—are more likely to be encountered: lexical non-
 23 prevocalic positions, non-initial positions, stressless contexts, and affixes We also considered
 24 contexts in which neutralizations are less likely to be found: lexical prevocalic contexts, initial
 25 positions, stressed contexts, and roots.

26 Following Trubetzkoy, in Chapter Four we discussed the typology of neutralization with respect
 27 to (1) the sorts of logical/functional relationships that exist among values that are likely to
 28 engage in neutralization, and also with respect to (2) the sorts of logical/functional relationships
 29 that exist among neutralizing values and their conditioning environments.

30 Having observed and described patterns of neutralization in these terms, in Section B we
 31 temporarily drove off the main highway of our discussion, taking a scenic route that terminated
 32 at some “false positive” dead ends.

33 In Chapter Five we rejected the superficially tempting proposal that Bloch's "partial phonemic
34 overlap" constitutes a form of neutralization, and, in fact, called into question Bloch's very
35 examples of the (very real) phenomenon.

36 We discussed in Chapter Six the fact that many putative cases of neutralization (and merger) are,
37 in fact merely nearly-neutralized (or nearly-merged), and thus may unproblematically be
38 characterized as contrast-maintaining.

39 In the Section C, we entertained various proposed explanations for the patterns of neutralization
40 we have considered.

41 In Chapter Seven we considered—and readily rejected—the proposal that neutralization may be
42 rooted in a synchronic pressure or constraint on *speakers* to ease their articulatory efforts.

43 In Chapter Eight we considered—and also rejected—the proposal that neutralization may
44 sometimes have its origins in speakers' knowledge of the phonetic consequences of their speech
45 activities, such that they might ensure easy perception on the part of their interlocutors.

46 We then switched our orientation, and considered *listeners'* roles as progenitors of neutralization,
47 in Chapter Nine investigating Ohala's proposals regarding listeners' interpretations—and
48 crucially, their sporadic *misinterpretations*—of the *phonetic intentions* of their interlocutors,
49 finding this account wanting for a number of reasons.

50 We then switched our emphasis from phonetics to semantics. In Chapter Ten we considered
51 Martinet's proposals regarding the role of "functional load" in patterns of neutralization, that is,
52 that oppositions which are responsible for few minimal pairs are more likely candidates for
53 neutralization, whereas oppositions that are responsible for many minimal pairs are less likely
54 candidates. We took kindly to this proposal, ultimately rejecting King's rejoinder.

55 In Chapter Eleven we expanded our investigation into *semantic misperception* as an important
56 factor in patterns of neutralization, discussing Labov's proposed mechanism by which systems
57 might avoid rampant homophony. We concluded that there exists a sporadic tendency for
58 listeners to misinterpret the lexical semantic content of the speech signal when phonetic variation
59 is sufficiently pronounced so as to make one word sound too similar to another word. The
60 consequent semantic confusion may set in motion an ongoing—and decidedly passive—pressure
61 toward homophone avoidance: successful speech propagates and conventionalizes; unsuccessful
62 speech gets passively filtered out, falling by the wayside.

63 Having explored explanatory approaches to neutralization, in Section D we moved on to further
64 exemplify the effect.

65 In Chapter Twelve we explored the proposal that an anti-homophonic pressure may passively act
66 on language change, by considering a single case study—neutralization and anti-homophony in
67 Korean—finding that, indeed, a language may tolerate massive amounts of (traditionally

68 characterized) derived neutralization, while simultaneously possessing remarkably limited
69 derived homophony as a consequence of these neutralization alternations.

70 Now embracing the proposal that anti-homophony is indeed a pressure affecting the diachronic
71 trajectory of linguistic sound systems (whereas a pressure against traditional neutralization—
72 passive or certainly otherwise—seems not to exist), in Chapter Thirteen we inventoried and
73 exemplified some of the domains over which anti-homophony might manifest itself, including
74 the lexical, the morphological, the phonological, the phonotactic, the paradigmatic, and the
75 pragmatic.

76 In Chapter Fourteen we concluded Section One by reiterating the proposal that neutralization—
77 as traditionally characterized—is *not* a function-negative pressure on language evolution, in the
78 sense of serving to decrease the semantic clarity of the speech signal. Indeed, we considered
79 systems that might tolerate downright bizarre patterns of variation that may lead to alternations
80 which, we argued, encountered no counter-pressure inhibiting their conventionalization, exactly
81 because they are heterophone-maintaining. We concluded that “distinctions are drawn that
82 matter”.

83 In Section Two we came to what is perhaps our most surprising conclusion: far from being a
84 function-negative pressure on language evolution, traditional neutralization actually plays a
85 function-positive role, in the form of serving as an aid to parsing the speech stream into its
86 functional (that is, semantic) constituents; words and morphemes.

87 We first considered these ideas in the context of Kruszewski’s “cement” (Chapter Fifteen), then
88 Trubetzkoy’s “boundary signals” (Chapter Sixteen), Firths’ “prosodies” (Chapter Seventeen),
89 and finally Saffran’s modern experimental approach to “transitional probabilities” (Chapter
90 Eighteen). Far from being a function-negative component of the phonological system, these
91 *decreases* in *phonetic distinctiveness* were shown to correlate positively with *increases* in
92 *semantic distinctiveness*; again, a most surprising result.

93 In this very brief postscript we return to our hypothetical language called Babelese, revisiting the
94 salient characteristics of its sound system in light of all intervening discussion.

95

96 **Babelese again**

97 Recall that Babelese was initially characterized as possessing nine values—three stops, three
98 nasals, three vowels—with roots of the form **CVCV**, **CVCVC**, **CVCCV**, and **CVCCVC**. Recall
99 further that, within roots, **CC** sequences may only consist of homorganic nasal-stop sequences.
100 This restriction constitutes a suspension of contrast and is thus a *static* property of roots: such
101 nasal-stop sequences are never in alternation such that one of the phonetic events—either the
102 nasal or the stop—may switch out independently. Because of this static or fixed quality of these

103 phonetic events, there is no functional motivation for language learners/users to partition them
104 into smaller linguistically significant units (call these segments if you must).

105 Indeed, we argued that *any* portion of the speech stream that is static—that is, is *fixed*—in terms
106 of its phonetic content may be treated as an unanalyzed chunk—as a *Gestalt*—due to the simple
107 fact that there is no linguistic evidence suggesting otherwise, since these portions never
108 decompose into smaller units. Any fixed *phonetic* events that possess fixed *functional* status are
109 *Gestalten*. These are, as a first approximation, morphemes, at least to the extent that morphemes
110 do not engage in alternation.

111 But of course, morphemes typically *do* engage in alternation, such that some sub-morphemic
112 phonetic components switch out under predictable circumstances, that is, as conditioned by some
113 extra-morphemic criteria. In Babelese we encounter just such a scenario in the form of nasal
114 assimilation: nasals assimilate to following (extra-morphemic) stops, such that a phonetic sub-
115 component of one morpheme predictably co-varies with a phonetic subcomponent of another
116 morpheme.

117 At this point, it becomes clear that (static) morpheme-internal nasal-stop sequences (**NC**)—
118 despite phonetic appearances to the contrary—bear no linguistic relationship to (dynamic)
119 between-morpheme nasal stop sequences (**N+C**), or, for that matter, between word nasal-stop
120 sequences (**N#C**). The morpheme-internal nasal-stop span is embedded in an (unanalyzed)
121 *Gestalt*, while the cross-morpheme nasal-stop span transparently consists of pieces belonging to
122 more than one linguistic chunk. The different statuses of these two phonetically comparable
123 spans (**NC** versus **N+C**) are evident to language users because of the simple fact that they engage
124 in distinct behaviors: **NC** never separates, whereas **N+C** does, such that, under the proper
125 circumstances, one nasal may switch out with another nasal. Under such circumstances, the
126 phonetically distinct nasals are underlain by an identical linguistic function: in the **N+C** context,
127 morpheme meaning almost always remains stable upon replacing one nasal with another. No
128 such situation ever arises in the (morpheme-internal) **NC** context.

129 Thus, phonological *Gestalten*—the elements of phonological contrast—come in only two
130 varieties: alternating and non-alternating portions of morphemes. Remember: the spans of speech
131 within morphemes—despite phonetic appearances to the contrary, and however “recyclable”
132 their attendant motor routines—are *not* necessarily built out of smaller linguistically significant
133 units that combine in various ways. Rather, the spans of the speech stream underlain by a
134 specific linguistic *function*—that is, morphemes—are the genuine building blocks of linguistic
135 structure, blocks that may only be partitioned into smaller units when there is evidence from
136 alternation to do so. It is thus incorrect to claim that Babelese possesses the nine contrastive
137 values inventoried earlier. Rather, Babelese possesses as many contrastive values as there are
138 phonetic components that don’t alternate, and phonetic components that do, and that’s it. And if
139 some linguists find it unpalatable that the inventory of contrastive values does not consist of

140 temporal and spectral slices that fit so snugly into the nice neat rows and columns that
141 graphically reveal their phonetic properties, well, with all due respect, tough!

142 Now, whereas most elements in alternation do indeed subserve a single linguistic function by
143 maintaining heterophony, there is, of course, one—and *only* one—exception to this
144 generalization, an exception that has been the (zooming) focus of the present study. These are
145 elements whose alternation derives homophones. It is these sorts of alternations—and, again,
146 *only* these—that may have function-negative linguistic consequences. And it is therefore just
147 these sorts of alternations that Babelese best steer clear of—or at least severely limit—if it wants
148 to effectively maintain its communicative function.

149 Obviously, we don't need to anthropomorphize Babelese in the sense of its “steering clear” of
150 excessive derived homophony. Rather, there are interlocutionary factors that slowly exert a
151 passive and decidedly self-organizing pressure on linguistic sound patterns such that derived
152 homophony is inevitably limited in its prevalence: the phonetic variation inherent to speech
153 production is a means by which new conventions evolve. Slow-going listener-based *phonetic*
154 *pressures* towards increases in neutralization inevitably encounter slow-going listener-based
155 *semantic counter-pressures* inhibiting excessive homophony: successful speech propagates—
156 listeners repeat the speech that they understand, and do not repeat the speech that they don't
157 understand, speech that does not carry the requisite semantic clarity. The result is that
158 alternations may readily evolve provided they are heterophone-maintaining; they are unlikely to
159 evolve if they are pervasively homophone-deriving.

160 Indeed, in Babelese (as elsewhere), traditional neutralization is not merely function-*neutral*
161 because of its typically heterophone-maintaining status. Rather, it is usually function-*positive*.
162 Whenever speakers of Babelese encounter a consonant sequence in which the first is not a
163 homorganic nasal, they are provided with unambiguous information that one word has ended,
164 and another word has begun. Although the jury is still out, it is not unreasonable to assume that
165 there exists a function-*positive* pressure *towards* an increase in (traditionally-defined)
166 neutralizing alternations, exactly because of their boundary-signaling function.

167 The power of Babelese, then, is self-generated, self-maintaining, and decidedly servo-
168 mechanistic. By its very use, it creates, processes, and deploys the raw materials necessary to
169 persist, to evolve, and, indeed, to thrive. Babelese, just as all real languages do, will always—
170 *always*—succeed in fulfilling its communicative function.