We have now considered quite a few approaches to neutralization in phonology, all the while slowing accruing arguments in favor of the overarching thesis that (1) neutralizing alternations are function-negative only to the extent that they derive homophones, (2) neutralizing alternations almost always maintain heterophony, and hence are usually function-neutral, and most surprisingly, (3) neutralization is often function-positive, by serving as an aid to parsing.

Employing the specialized terminology used herein, phonological RHyme may readily increase until encountering a counter-pressure inhibiting undue decreases in phonological REASON, in the form of NEUTRALIZATION.

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

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

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

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

Having observed and described patterns of neutralization in these terms, in Section B we temporarily drove off the main highway of our discussion, taking a scenic route that terminated at some “false positive” dead ends.
In Chapter Five we rejected the superficially tempting proposal that Bloch’s “partial phonemic overlap” constitutes a form of neutralization, and, in fact, called into question Bloch’s very examples of the (very real) phenomenon.

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

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

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

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

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

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

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

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

In Chapter Twelve we explored the proposal that an anti-homophonic pressure may passively act on language change, by considering a single case study—neutralization and anti-homophony in Korean—finding that, indeed, a language may tolerate massive amounts of (traditionally
characterized) derived neutralization, while simultaneously possessing remarkably limited derived homophony as a consequence of these neutralization alternations.

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

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

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

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

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

Babelese again

Recall that Babelese was initially characterized as possessing nine values—three stops, three nasals, three vowels—with roots of the form CVCV, CVCVC, CVCCV, and CVCCVC. Recall further that, within roots, CC sequences may only consist of homorganic nasal-stop sequences. This restriction constitutes a suspension of contrast and is thus a static property of roots: such nasal-stop sequences are never in alternation such that one of the phonetic events—either the nasal or the stop—may switch out independently. Because of this static or fixed quality of these
phonetic events, there is no functional motivation for language learners/users to partition them into smaller linguistically significant units (call these segments if you must).

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

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

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

Thus, phonological Gestalten—the elements of phonological contrast—come in only two varieties: alternating and non-alternating portions of morphemes. Remember: the spans of speech within morphemes—despite phonetic appearances to the contrary, and however “recyclable” their attendant motor routines—are not necessarily built out of smaller linguistically significant units that combine in various ways. Rather, the spans of the speech stream underlain by a specific linguistic function—that is, morphemes—are the genuine building blocks of linguistic structure, blocks that may only be partitioned into smaller units when there is evidence from alternation to do so. It is thus incorrect to claim that Babelese possesses the nine contrastive values inventoried earlier. Rather, Babelese possesses as many contrastive values as there are phonetic components that don’t alternate, and phonetic components that do, and that’s it. And if some linguists find it unpalatable that the inventory of contrastive values does not consist of
temporal and spectral slices that fit so snugly into the nice neat rows and columns that graphically reveal their phonetic properties, well, with all due respect, tough!

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

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

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

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