Guidelines for writing phonological rules

1. Basic form: \[ A \rightarrow B / C ___ D \]
   - Class of segments targeted by rule
   - the change
   - the context

2. Make the rule as simple as possible. In particular don't refer to features which aren't strictly needed to make the rule work correctly. (The simplicity imperative reflects the assumption that simpler rules are easier to learn; therefore, given two rules, both of which correctly account for the data, the simpler one is the one which a learner will adopt.)

   Examples:
   - In B (the change), only list the feature(s) which change(s), you shouldn't repeat the features from A which remain the same (assumption: what the rule doesn't change stays as is, so why mention it?)
   - In A (the target), don't mention the feature which is going to change in B. E.g., a rule which devises word-final obstruents = [-son] \rightarrow [-voi] \rightarrow [-son] \rightarrow [-voi]; this rule applies to voiceless as well as voiced sonorants, but it applies vacuously when the input is already voiceless, and so the simpler rule does not lead to any incorrect result.
   - Let's say you have a rule which targets (or is conditioned by) the vowels [i,e]. These are [-low, +front, +tense, -round], but if these are the only front vowels in the sound system (as is often the case), you don't gain any further precision by referring to [+tense], [-low] and [-round] in the rule.

3. Make the rule as general as possible, so long as it is consistent with the data you have, and so long as this doesn't result in a more complex rule. For example: your data for language X shows that high vowels consistently lower before three uvulars, q, χ and R. You also see from the data that Language X has another uvular, G, but there is no evidence showing, one way or the other, whether high vowels lower before G as well. In the absence of contrary evidence, you should assume that they do; so write the rule so that it is conditioned by any uvular, including G. Note also in this case, that the more general rule is also the simpler rule, since it would require additional features to make the rule apply to q, χ and R but not G.

4. Notwithstanding principles 1 and 2, your rule system must account for all the features in B which change. For example, if a rule inserts a schwa in some context, part B of the insertion must exhaustively list the features of schwa. If an affrication rule turns /t,d/ to [ʃ, z] before /i/, part B must list all the features that distinguish [t,d] from [ʃ, z], namely [-ant, +dist, +strid, +delrel]. Proviso: a fuller analysis of the data set may show that in this language all -ant stops are predictably [+dist, +strid, +delrel]. If so, it makes sense to state this as a separate, later applying, rule (-ant \rightarrow [+dist, +strid, +delrel]). As long as the rule system as a whole correctly predicts the feature values in the affrication context, these predictable adjustments can be factored out of part B of the affrication rule itself.

5. Always check your rule(s) carefully against the data, to make sure your rule doesn't fail to apply in any situations where it ought to apply, or vice-versa.

6. Some conventions:
   - Insertion (epenthesis, excrescence): \( \emptyset \rightarrow i, \emptyset \rightarrow t, \) etc.
   - Deletion (syncope, apocope, aphaeresis): \( i \rightarrow \emptyset, \) etc.
   - C = -syllabic, V = +syllabic
   - \( C_0 \) = any number of -syl segments, from 0 to \( \infty \), \( V_1^3 \) = any number of V's from 1 to 3.
   - Enclose feature combinations in square brackets (e.g. [-son, +voi], to distinguish a voiced obstruent from an obstruent-voiced segment sequence.
   - place variable coindexation (see Hayes p. 93)
   - Rules may be context-free, i.e. just \( A \rightarrow B. \)
   - Switching (metathesis): [+cor][+nas] \rightarrow 2 1 \ (not equivalent to [+cor][+nas] \rightarrow [+nas][+cor])