

# Some guidelines for writing up HW assignments

Phonology I / Ryan Bennett

## Writing up analyses

Your homework assignments should always be written as *essays*, with an introduction, conclusion, and clear logical structure. That's true even for short write-ups (1-3 pages).

## What we look for in a good write-up

In *Phonology I*, we will evaluate your HW assignments along several dimensions. To illustrate, consider the following made-up data set:

- (1) [p b] in language  $\mathbb{L}$
- a. [paba]
  - b. [sip]
  - c. [ubap]
  - d. [apka]
  - e. [ibup]
  - f. [tabaptap]

What's the distribution of [p b] in this data set, and how would you analyze that distribution? Think about it for a second before reading on.

The basic pattern is this:

- [p b] are in complementary distribution in language  $\mathbb{L}$ : [b] occurs between vowels, and [p] occurs elsewhere.
- [b] has a highly predictable distribution, [p] does not.
- Therefore: /p/ should be chosen as the underlying phoneme, and [b] should be derived from /p/ with a phonological rule.

In your write-up, we'd look for the following things:

- 1) Does the analysis in the write-up **actually account for the phonological patterns** it is trying to account for?

A rule like /p/ → [b] / V\_\_V works for the data in (1).

A rule like /p/ → [b] / V\_\_ does *not* work for the data in (1). (Why not?)

- 2) Is the analysis in the write-up the **best possible analysis**, or are there clear alternatives that account for the same data in a simpler, more unified way?

For example, a rule like

$$(2) \quad /p/ \rightarrow [b] / \left\{ \begin{array}{c} a \\ u \\ i \end{array} \right\} \text{---} \left\{ \begin{array}{c} a \\ u \end{array} \right\}$$

will correctly produce the specific examples in (2). But it's not a very good rule.

For one, rule (2) is **missing a broader generalization** about the data. The six environments listed in the rule clearly have something in common: they're all instances of the environment  $V\_V$ .

Rule (2) is also **too specific**: while it may work for the small data set in (1), it's unlikely to be correct for other forms in the language. For example, rule (2) predicts that we would find  $[p]$  in the environment  $[a\_i]$ , rather than  $[b]$ . Now, we don't have explicit evidence either way in our data set (2). But given that  $[b]$  seems to occur between any two vowels, regardless of their quality, this prediction is probably wrong for language  $\mathbb{L}$  as a whole.

Try to make the **strongest generalization which is consistent with the data**. Strong generalizations are good: they **make predictions** that can be tested, and potentially falsified. That's what scientific theories are supposed to do. Be bold!

In comparison, rule (2) doesn't make very many predictions beyond the data set itself. For that reason, rule (2) isn't very useful as a phonological analysis of language  $\mathbb{L}$ , or as a scientific theory more generally.

- 3) Is the analysis **explanatory**? That is: does the formal analysis help us understand *why* the data looks the way it does?

Consider a rule like  $/p/ \rightarrow [b] / V\_V$ . This rule states that  $[b]$  occurs between vowels, and  $[p]$  does not. This makes phonetic sense:  $[b]$  is voiced, and vowels are voiced, so this looks like a case of assimilation. This rule is explanatory in the sense that it helps clarify the phonetic factors behind the patterning of  $[p\ b]$ .

In contrast, the more complicated rule (2) isn't very explanatory. It implies that  $[b]$  occurs between a random assortment of different vowels. Phonetically speaking, that doesn't make a whole lot of sense.

- 4) **Theory comparison**: does the write-up explain why the proposed analysis is better than other salient alternatives? If there are any problems or potential problems with your own analysis, you should discuss those problems too.

For example, does the write-up argue clearly for choosing  $/p/$  rather than  $/b/$  as the shared underlying phoneme in language  $\mathbb{L}$ ?

- 5) **Is the paper written clearly?** Is it easy to understand what's being claimed and why?



Let me emphasize something: **writing your paper clearly is just as important as having a working analysis** (and maybe even more important!). It doesn't matter if your analysis is correct if no one can understand it.

## Practical advice about writing up analyses

- 1) **Analyze before you write:**

A good analysis takes time to develop. You will usually have to leave more than an hour or two for the job. The first analysis you come up with is not always the best one. Leave yourself time to come back to your analysis and think about whether you have any new insights that could make it better.

It's important to put off writing anything until you have worked out the details of your analysis, and your argumentation. Be clear on where you're going and why, before you put pen to paper (or finger to keyboard).

- 2) **Write for a specific audience:**

Write as if the reader (me) does not have access to the data set that you're analyzing. **Your write-up should be entirely self-contained:** the reader should not have to look at anything else to understand what you're saying.

Apart from the fact that this habit makes for good writing, it will force you to be explicit about your descriptive generalizations — an important step in any formal analysis.

Think of your audience as being composed of undergraduate linguists with about the same background as you: they know a little bit about phonology, but may not have any familiarity with the particular language or phenomenon you're dealing with. Ask yourself: what can I assume my readers already know, and what needs to be spelled out for them?

- 3) **How to present data:**

**Don't present the data in a big block at the beginning or the end of the paper. Instead, weave the data together with the text, using carefully chosen examples to support your arguments.** In general, you should use numbered examples to present data rather than putting the data in the paragraph text itself. **When you present data, you should always explicitly mention what it's showing us.** To illustrate:

### **Good presentation and explanation of data:**

In language  $\mathbb{L}$  [p b] are in complementary distribution. The sound [b] always occurs between vowels, as in (3).

- |     |    |        |    |            |
|-----|----|--------|----|------------|
| (3) | a. | [paba] | b. | [ubap]     |
|     | c. | [ibup] | d. | [tabaptap] |

In contrast, [p] never occurs between vowels. This can be seen in (3), as well as in the additional forms in (4).

- (4) a. [sip]  
b. [apka]

Since [p b] never occur in the same environments, and are phonetically similar, they are most likely allophones of the same underlying phoneme.

That's *much* better writing than the following passage:

**Bad presentation and explanation of data:**

Here's some data from language  $\mathbb{L}$ .

- (5) a. [paba]  
b. [ubap]  
c. [apka]  
d. [ibup]  
e. [tabaptap]

It's obvious that [p b] are allophones of the same phoneme.

The previous, badly-written passage asks the reader to do too much work for themselves. It's your job to *explain* to the reader what the data shows us and why.

Here's another passage that could be improved by clearer presentation of data:

**Bad presentation and explanation of data:**

The sound [b] always occurs between vowels, [paba], [ubap], [ibup], [tabaptap]. [p] never occurs between vowels, [sip], [apka]. Therefore [p b] are allophones of the same underlying phoneme.

This passage is harder to read than the well-written passage above. The crucial data is hard to find (and hard to read!) because it's mixed in with the text itself. Also, the write-up doesn't do a good job of walking the reader through the author's argumentation — too much is left for the reader to figure out themselves.

4) **Use diagrams and tables:**

If you have a formal proposal of any kind (e.g. a particular phonological rule), use a diagram or table to illustrate how it works with some specific examples. Make sure to include some explanation in the text of what the diagram is supposed to be showing.

5) **How much prose to include:**

Brevity and clarity are important parts of any write-up. Every single line of text should be limited to information which is either (1) crucial for the analysis developed in your paper, or (2) *relevant* background on the language/data/phenomenon/etc. you're dealing with.

If you're providing a formal analysis of stress in Parisian French, for example, it may be important to discuss the phonetics of stress in that language. It is not important to discuss how French stress developed historically from the Latin stress system.

Avoid writing the same thing twice using only slightly different wording. Needless repetition should be eliminated (see?).

**6) Have a good introduction and conclusion:**

Include an introduction, even if it's just one or two sentences. The introduction should state the main point(s) you want to show.

It's OK to write something like "In this paper I will look at some sounds in Icelandic...", but it's not very informative. It would be better to write "In Icelandic, the voicing of sonorants is predictable from context. In this paper I will show that sonorants are underlyingly voiced, but become voiceless in [describe environment here]". (This also illustrates the point that you should know where your analysis is going before you start writing it up.)

The conclusion should be similar: briefly re-state what you argued for in the paper, and why it's important.

**7) What to leave on the cutting room floor:**

Your goal is to get the analysis across, not to present all the analyses that you considered before you converged on the best one. I enforce a 'No Blogging' rule: I want to know what you achieved, but I don't need to know the history of the intellectual struggle that got you there.

If you realize that your analysis has problems as you write it up, then go back and rewrite the assignment. Remember: what you turn in is a well-finished and succinct presentation of the best analysis you could find. It should not be a history of your trial and error work.

That said, it's often important to discuss plausible alternative analyses of the data you're considering. You should do this (briefly) after setting out your own analysis.

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