

How to Write an Essay in Linguistics

The following guidelines range from very general to very specific. They are also more specifically geared toward writing essays in sociolinguistics or empirical methods rather than other areas of linguistics, though many of the same general principles apply. It is to your benefit to try follow these guidelines from the start of your first draft; the closer you follow them, the easier it will be for your instructor to make useful comments on your drafts, focusing on *content*, rather than style; on *linguistics*, rather than writing ability. It will also save you a lot of time because there will probably be less restructuring needed between your first draft and your final draft.

GENERAL STRUCTURE:

1. Tell us what you're gonna tell us.
2. Tell us!
3. Tell us what you told us.

At a very basic level, this is all you need to know. The main point here is that your paper is not a mystery novel; there should be no 'big reveal' at the end. Rather, you want to set up the reader's expectations so that they know up front what you're trying to argue and, while reading your paper, will see if they're convinced by how you make your arguments.

The first step roughly corresponds (to the first paragraph of) your introduction and the third step roughly corresponds to (the first paragraph of) your conclusion (remember that this is an art, not a science, and these are guidelines, not rules). The bulk of your paper is in the second step. This is where you make your case: you state how you went about answering your research question (your Methods), what you found (your Results) and what you think about what you found (your Discussion). Every single section relates back to that *one main point* you're telling your audience.

Meyerhoff and Schlee (eds., 2010: *The Routledge Sociolinguistics Reader*; see references) frame the general structure in four parts, teasing apart my step '2' above just a bit more:

1. Set the scene (introduction, literature review, methods) – What's the overall point?
2. Present the data – What's the relevant data? Only statistical results, or discourse too?
3. Analyse the data – What's interesting? Any generalizations? Any surprises? Why?
4. Conclude – "explicitly and conclusively address the essay question."

The rest of this handout goes into greater detail about how to structure your write-up. Note, though, that not all papers in linguistics are structured exactly this way. For example, papers in Applied Linguistics (especially those using qualitative analysis) do not always have sections labelled 'Results' or 'Discussion'. On the other hand, papers in Speech Technology might be better seen as lab reports, rather than essays. So, while the general structure given here is common to many papers in linguistics, keep in mind that there are bound to be slight (or not so slight!) modifications needed depending the writing practices in specific sub-areas.

SPECIFIC STRUCTURE:

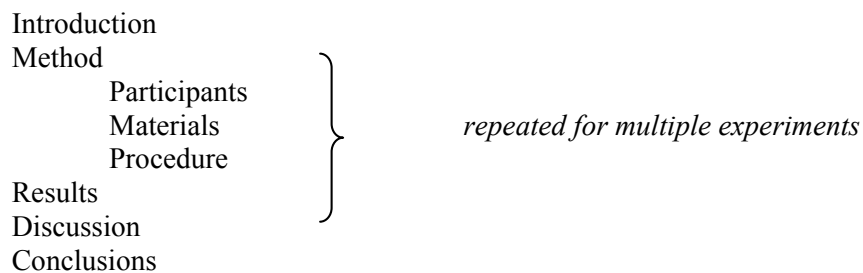
1. Introduction
2. Literature Review
3. Methodology
4. Results
5. Discussion
6. Conclusion
7. References

or...

1. Introduction
2. Literature Review (of the theory)
3. Literature Review (of the methodology)
4. Description of the Fieldsite / Corpus
5. Methodology / Data Collection
6. Results / Discussion
7. Conclusion / Future Directions
8. References
9. Appendices

...or any other combinations of those basic components.

If you've run an experiment or two your write-up might look more like this:



...whereas if you're focused on multiple analyses, it might look more like this:

- Introduction
- Data
- Analysis 1
- Analysis 2
-
- Discussion
- Conclusions

The rest of this handout goes on to say more about each of these sections. You can also read about any of these sections in the recommended readings provided at the end of this handout.

INTRODUCTION

This is where you give your main argument. Frame the argument in terms of the questions you're answering. One purpose is to motivate the research (to show why it's worth doing), while another purpose is to provide the necessary background for a reader to understand your analysis, later on.

Who should you imagine your reader to be? Roughly: an interested and intelligent member of the public who has about a 1st-year level familiarity with linguistics. Think: the person you were before starting this class/project. *Not*, in other words, your instructor.

Three things the introduction section must do:

- State the research problem.
- State the context in which the problem needs to be understood.
(This is then developed further in the literature review)
- State the response to that problem.
(Purpose of the study, hypotheses, and approaches)

An example from Language Acquisition research (Jusczyk & Aslin 1995)

Context: Previous studies have demonstrated that by 6 months of age infants are capable of discriminating a wide range of phonetic contrasts. But such studies do not address infants' ability to recognize words in fluent speech.

Problem: When do infants become able to detect the occurrence of particular words in fluent speech?

Response: We address the research problem by testing whether 6 and 9 month-old infants familiarized with a particular word in isolation display any tendency to listen longer to sentences containing that word than to sentences without the familiar word.

State the research problem

Criteria of research problems (Kerlinger 1986)

- The problem expresses a relation between two or more variables (e.g., Is A related to B? How are A and B related to C? How is A related to B under conditions C and D?).
- The problem is stated clearly and unambiguously in question form.
- The problem is such as to imply possibilities of empirical testing.

State the context of the problem

This is brief summary of the literature review (see next section)

State the response to the research problem (purpose and rationale)

The closing portion of your introduction section should (re)state the purpose of the study (why and how you are going to tackle the research problem) alongside (if applicable) any hypotheses you may have – what results you expect and why?

LITERATURE REVIEW

Every introduction includes or is followed by some kind of literature review section, which gives the reader the necessary background to understand your study. How extensive this is depends on the questions you focus on. It is ideal if you can bring in literature beyond what's been mentioned in your course. Depending on the nature of the assignment, evidence of independent reading may be required for a good mark

A literature review is an in-depth discussion of what previous studies have found as they relate to your research question.

What it is *not*: a simple summary of all related studies.

What it is: a discussion of *your* research questions with respect to what's already been published in linguistics. It's the section that gives your paper a foundation from which you can launch your own study and argument.

Also, do not just list issues and findings related to your study, no matter how generally important each point might be. The purpose of the review is to tell the reader why your research problem needs to be addressed, not what you have read and know about the topic.

Some research projects will require reviews of several different aspects of the linguistics literature. For example, in a variationist sociolinguistics paper that looks at the role of voice quality and gender at an Edinburgh university (for example), the author might first want to give a review of previous studies on language and gender, followed by a review of studies on language use in Edinburgh (and language use in universities), followed by a review of voice quality as a sociolinguistic variable. The order of these sections will depend on the specific analytic focus of the paper.

Provide the context of the research problem and motivate your study by discussing:

- Theoretical issues that need to be resolved
- Pertinent findings that lead to the research problem
- Relevant methodological issues in previous research

Tip: Discuss issues, claims and findings, not studies or people:

Not effective

Benedict (1979) tested the comprehension skills of 36 children and concluded that infants begin to comprehend words some time between the 8th and 10th month. Huttenlocher (1974) also concluded that around 9 months of age, children begin to show signs of word recognition. However, Oviatt (1980), who conducted a similar study, obtained different results [...]

Better

There are reports in the language acquisition literature that infants show some limited comprehension of words beginning at approximately 9 months of age (Benedict, 1979; Huttenlocher, 1974). Yet, other studies suggest that comprehension skills are quite limited even at 11 months, and that it is not until around 15 months that infants show signs of comprehending and recognizing novel words (Oviatt, 1980, Thomas, Campos, Shucard, Ramsay, & Shucard, 1981). (Jusczyk & Aslin 1995: 2-3)

Exception: Key studies that introduce a fundamental theoretical point, present a major finding or draw a conclusion that you wish to contest do need to be discussed individually.

METHODS

In the Methods section, reflect on the methods you used. For sociolinguistics, this includes the design of the data (collection process), the speaker details (relevant characteristics), the definition of the variable (and the envelope of variation), the definition of the variants (and justifications), the choice of the linguistic and social factors you will examine, and any methodological problems you had (but don't dwell on these, just discuss them to the extent that they effect the rest).

Mention anything that is necessary for a reader to understand what you did, and why you did it. Ideally, you will mention all details that someone would need if they wanted to try to replicate your analysis or compare it with other related studies. On that note, don't forget to cite the software you used (see References.), e.g. (for sociolinguistics),

“All utterances by Jane Doe were transcribed orthographically using ELAN (Brugman & Russel 2004). Coding for the realization of /s/ was done manually in Praat (Boersma & Weenik 2011). All statistical tests were run using Rbrul (Johnson 2008).”

Tip: as a matter of style, avoid narrating your (thought) process, i.e., “First I tested X, which gave me Y result, which then inspired me to test Z, but then...” etc. Instead, summarize it concisely, something like “I tested both X and Z.” Also note the verb tenses you use throughout, but especially in your methods section: if you present your methods in future tense (“I will interview X people”) then it gives the impression that your research has not yet been completed.

RESULTS

If you're writing a linguistic paper that reports on quantitative results, then you need to write up those results before you get to the analysis in the Discussion section. First state the main results and explain whether they support or reject your hypotheses or predictions. Then discuss the data to justify the conclusions.

One good way to start is to make visual representations of your data. It is worth spending time thinking about tables and figures and how they interact with the structure of your essay. Proper use of tables and figures can greatly enhance the quality of your writing, and poor use of these aids can greatly hinder the quality of your writing.

Tables & Figures

The idea of a table or figure is to *help* your reader understand your results. To use tables and figures effectively, do not assume that they are self-evident. Graphs should be easy to read and interpret, but always also tell the reader what to look for in each table or figure and explain what it shows. It should take less time to understand the graph than it would to read a paragraph explaining the same information – that is the point of visual aids. You must know what kind of graph will most clearly present your results, and why.

Certain data lend themselves to line graphs, others to column graphs. Avoid pie charts. If you're not sure which one to use, ask yourself: are my data continuous or discrete? Am I showing percentages or counts? Use a line graph if your variable is continuous, and don't use one if it's discrete. Do consider using a stacked bar graph if your numbers add up to 100%. Do use descriptive titles, and label the axes of graphs. When it doubt, play around with a bunch of graph types and see which one conveys your results most clearly. Also always be sure the graphs are easy to read when printed in greyscale; default Microsoft Excel graph colours (red, blue, etc.) look the same in grey.

Reporting Results

In sociolinguistics, people often report both quantitative results and qualitative results. The quantitative results definitely go in the results section; the qualitative results (e.g., a close, line-by-line analysis of a bit of transcript), might fit better in the analysis section. Wherever it goes, report the main statistical finding first, then report the smaller findings (e.g., report the regression model first, then the smaller X^2 test results). Report on the qualitative data only after you've described the numerical data. This allows your reader to interpret the qualitative data with respect to the broader picture. See the Appendix for tips on writing about statistics.

Tip: Be very careful with some of the words you use to report your results. These words include but are not limited to: X *proves* Y, X *caused* Y, X shows Y to be *true*, and X is *significantly* impacting Y. Statistics only give you more or less confidence that your hypothesis is true; results never *prove* any hypothesis (the only proper use of the term 'proof' is in the mathematical sense). The discussion of *truth* is similar; statistics cannot determine 'truths'. Similarly, *significantly* should only be used (in the writing of empirical methodological studies) to refer to statistically significant results. The tests we run look for *correlations* between variables, not *causations*. You might *hypothesize* that X *causes* Y, but definitive evidence for causation is not likely to be obtained in a university course write-up.

Another common issue: Remember that the words 'more' and 'less' are relative. If you say 'X shows more Y' I can't understand that statement without knowing what it is more *than*. Sometimes you might think that the previous sentence has made this relationship obvious, but you often can't assume that it has.

DISCUSSION

This is where you talk in depth about what you interpret the results to show, what you find interesting, and why. In short, consider what your results may mean. Tell your reader how you interpret your results, and why: What's the story behind your results? Make sure to provide evidence for your interpretation; be realistic and honest. Provide an explanation for your results while ruling out others.

First, summarize your most important (strongest, most interesting) findings. Then, relate them to other, broader arguments (which you laid out in the introduction).

Consider: Are there systematic generalizations across all the examples? Are there any thought-provoking contradictions? How will you explain/justify the generalizations or the contradictions, and how will you explain why they are 'systematic' or 'thought-provoking'? (These questions taken from Meyerhoff & Schleeff's Routledge reader.)

Steps:

- State whether your research question is answered (and how) or whether your hypotheses are supported or not supported.
- Evaluate, interpret and qualify your results.
- Identify the implications of your study.
- Propose future research (if any).

Guiding questions (from the APA manual):

- What have I contributed here?
- How has my study helped to resolve the original problem?
- What conclusions and theoretical implications can I draw from my study?

CONCLUSION

Reference the hypotheses put forth in the introduction, and state how well your results met those hypotheses. Link your own results and explanations to other research studies and indicate potential areas of future research. This is a good place to get extra creative. At the same time, this section should be as succinct as possible.

FUTURE DIRECTIONS

Conclusions often contain an optional section about ‘future directions.’ Some people like to include it when they are inspired (or frustrated) by all the interesting questions they can’t address in the length of their paper. This section typically appears towards the end of the conclusion, and should follow logically from the conclusion. *e.g.*, “The correlation between this particular sound change and age was surprising, and prompts the question about the future of this particular sound change in this community: if older speakers use more of it, is the amount of vocalization decreasing in the community? A follow-up analysis with a large number of speakers from a wide age range might help address this question.”

REFERENCING

Why reference? Because if you don’t, and yet you draw your ideas from someone else, then you may be committing plagiarism. (Plagiarism: Taking someone else’s words or ideas without attributing those words or ideas to that person, *i.e.*, stealing.) Please refer to your course handbook’s section on “documenting sources of information: quotations, plagiarism and bibliography”.

References should be seen as helpful tools; they are things that help you make your argument, well. Whatever you’re writing about will be connected in some way to some other arguments someone else made. By being able to reference those earlier works, you (1) motivate your argument, making it important and worth investigating, and (2) save yourself the trouble of having to go into a lot of detail about exactly what those earlier works did.

Students often ask if they have ‘enough’ references or ‘too many’ references. To a professional researcher, this is a strange question. The references that go into your reference list or bibliography are the references that you’ve cited in your essay. No more, no less. And the references that go in your essay are those that help you motivate your study and help you make your argument. So you clearly need more than one or two, because you want to make sure your argument looks like an argument worth making. But there’s no magic number.

How to reference? The interdisciplinary nature of linguistics means that there simply isn’t one style guide that fits all. Ask your instructor (some explicitly prefer APA; see this handout’s references). If you’re unsure, adopt the styles you’ve seen in the majority of your readings. If the referenced work is something unusual like a website with no author or publisher, or an audio file with no author or publisher, provide as much information as someone would need to be able to locate the source themselves (this is, ultimately, the point of a reference).

For yet another source, check out the Unified Style Sheet for Linguistics Journals:

<http://linguistlist.org/pubs/tocs/JournalUnifiedStyleSheet2007.pdf>

Ultimately, the point is to just pick a style and stick to it. You’re more likely to be marked off for lack of consistency than choice of style.

How to reference studies cited in other sources? In the bibliography, include both the original source and the found source. In-text, rather than “(Hazen 2001)”, given the full attribution by saying “(Hazen 2001, as cited in Meyerhoff 2006)”.

MECHANICS & STYLE

Please use A4 paper, standard margins, a standard font, and either 1.5- or double-spacing. Please use the same font for *all* text in the document: main body, headers, footnotes, and tables. Please use page numbers. Please check your spelling (UK conventions are preferred)!

Follow these writing conventions:

- Use indented or blocked paragraphs.
- Use in-text author/year citation, not footnote citation.
- Use consistent formatting style. Adopt a style sheet (APA, Chicago, MLA etc.) and stick to it.

Tips: Avoid words like *obviously* or *absurd*. In other words, avoid making strong affective judgments about your theory/results or another researcher's theory/results. Intellectual theories are rarely if ever 'obvious' or 'absurd' – they usually provide testable, empirical questions. Using strong judgment terms like these is not only off-putting but lacks academic sophistication and accuracy. Other words and phrases that should be used with utmost care include: *clearly*, *crucially*, *without a doubt*, or *in (matter of) fact*. These phrases can be used effectively, but they should be used carefully and sparingly.

Connectives like *however*, *furthermore*, and *therefore* can be very useful in structuring your argument, but be sure to use them intentionally and sparingly. Avoid using them at the start of every single sentence. Sentence-initial *thus*, *yet*, and *but* should be avoided in general.

REFERENCES ABOUT WRITING ACADEMICALLY

American Psychological Association. (2001). *Publication manual*. Washington DC: APA.

See also: <http://owl.english.purdue.edu/owl/resource/560/01/>

Booth, W. C., Colomb, G. G. & Williams, J. M. (2003). *The Craft of Research* (2nd ed.). Chicago: University of Chicago Press. [highly recommended!]

Hatch, E. & Lazaraton, A. (1991). *The research manual. Design and statistics for applied linguistics*. Boston: Heinle & Heinle.

Kerlinger, F. N. (1986). *Foundations of behavioral research*. Fort Worth: Holt, Rinehart & Winston. [highly recommended!]

Menn, L. & Ratner, N. B. (2000). *Methods for studying language production*. Mahwah, NJ: Erlbaum.

Swales, J. M. & Feak, C. B. (2004). *Academic Writing for Graduate Students, 2nd Edition: Essential Tasks and Skills*. Ann Arbor: University of Michigan Press.

Turabian, K. (1996). *A manual for writers of term papers, theses, and dissertations*. Chicago: Chicago University Press. [highly recommended!]

Walker, J.R. & Taylor, T.W. (1998). *The Columbia guide to online style*. New York: Columbia University Press.

SELECTED SOURCES FOR CITING SOME LINGUISTIC SOFTWARE

ELAN: See: <http://www.lat-mpi.eu/tools/elan/citing>

Praat: See: http://www.fon.hum.uva.nl/praat/manual/FAQ_How_to_cite_Praat.html

Rbrul: Cite this article:

<http://onlinelibrary.wiley.com/doi/10.1111/j.1749-818X.2008.00108.x/abstract>

MORE TIPS ON ACADEMIC WRITING:

PPLS link to how to write a philosophy paper:

<http://www.jimpryor.net/teaching/guidelines/writing.html>

PPLS link to how to write a psychology paper:

<http://www.ppls.ed.ac.uk/students/postgraduate/documents/WritingEssaysforPsychology.pdf>

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Appendix: Writing About Statistics

If your paper calls for statistical results, these go in the “Results” section. Always include descriptive statistics (e.g., means, standard deviations). When reporting inferential statistics (e.g., t tests, ANOVA, chi-square), include information about the obtained value of the test, the degrees of freedom, the probability level and the direction of the effect.

The description of statistics often accompanies a graph, with brief prose describing what they show: e.g., “Figure 1 shows the relationship between ethnicity and vocalisation, which was found to be significant $\chi^2(1, N = 40) = 41.04, p < 0.0001$.”

Tip: *p*-values are always written with a lower-case, italicized letter. Significant values are often shown as $p <$ the value, whereas non-significant values are usually shown as $p =$ the value, up to 3 decimal places (though these conventions vary with different styles).

SPECIFIC TESTS

See also: <http://my.ilstu.edu/~jkhahn/apastats.html>

Mean and Standard Deviation are most clearly presented in parentheses:

The sample as a whole was relatively young ($M = 19.22, SD = 3.45$).
The average age of students was 19.22 years ($SD = 3.45$).

Percentages are also most clearly displayed in parentheses with no decimal places:

Nearly half (49%) of the sample was married.

Chi-Square statistics are reported with degrees of freedom and sample size in parentheses, the Pearson chi-square value (rounded to two decimal places), and the significance level:

Chi-square analysis of frequencies in Table X shows that the SLI participants produced more local agreement errors than did the control group [$\chi^2(4, N=90)=10.51, p<0.05$].

T-Tests are reported like chi-squares, but only the degrees of freedom are in parentheses. Following that, report the t statistic (rounded to two decimal places) and the significance level.

The experimental group had a higher post-test score ($M=4.63$) than did the control group ($M=1.38$) [$t(22)=2.62, p<0.01$].

ANOVAs (both one-way and two-way) are reported like the t test, but there are two degrees-of-freedom numbers to report. First report the between-groups degrees of freedom, then report the within-groups degrees of freedom (separated by a comma). After that report the F statistic (rounded off to two decimal places) and the significance level.

The mean scores for the intermediate and advanced Spanish group were 34.38 and 49.92, respectively. The mean scores for the intermediate and advanced Greek group were 56.77 and 54.86, respectively. The analysis of variance indicated a significant interaction between language group and proficiency [$F(2, 34)=123.07, p<0.001$].

Correlations are reported with the degrees of freedom (which is $N-2$) in parentheses and the significance level:

The two variables were strongly correlated, $r(55) = .49, p<0.01$.

Regression results are often best presented in a table. APA doesn't say much about how to report regression results in the text, but if you would like to report the regression in the text of your Results section, you should at least present the unstandardized or standardized slope (beta), whichever is more interpretable given the data, along with the t-test and the corresponding significance level. (Degrees of freedom for the t-test is $N-k-1$ where k equals the number of predictor variables.) It is also customary to report the percentage of variance explained along with the corresponding F test.