Academic Skills in Linguistics Crash Course

Curt Anderson
andersc@hhu.de, curtanderson@gmail.com
http://curtanderson.github.io/skills/

Academic Skills: A Crash Course for Grundkurs Tutors
Heinrich-Heine-Universität Düsseldorf

October 2019

Introduction and rational for this course

- Help you have better academic skills and familiarity with common practices in academia.
- And, since you are also tutoring (as part of the linguistics MA here), you having these skills will help you pass them on to the BA students that you tutor.
- Thus, the academic skills in linguistics crash course, to familiarize (and refamiliarize) you with them.
- Method: Make you reflect on the process more. Call attention to your own weaknesses and let you fix them.

About me

I'm Curt Anderson. About me:

- Ph.D. in Linguistics (2016), Michigan State University
- Postdoctoral research for DFG SFB 991 (projects B09 and C10) since June 2016
- Research areas I'm interested in: semantics, syntax, psycholinguistics
- Teaching experience: introduction to linguistics, introduction to semantics and pragmatics, seminar on semantics of modification
- Contact: andersc@hhu.de, curtanderson@gmail.com

Academic skills?

What are you hoping this course will help you with?

Roadmap

Lots to cover over the next few days. The important things:

- Finding academic papers
- Reading academic papers
- Writing papers:
  - Good citation practice
  - Argumentation
  - Writing style and formatting standards in linguistics
  - Plagiarism
- Organization
  - Research organization
  - Time organization
  - Tutorial organization
- Presentation skills
- Teaching skills

Caveat!

- We might move quick through some of the these topics...
- Or we might move kind of slow.
- Good news: We can tailor this course to what you need.
- This class is meant to help you out:
  - Help you fix anything you might be deficient in from your BA program
  - Help you transition to being productive MA students
  - Help you be better tutors
- Note: all the slides for this week will be available to you on Saturday on the course website.

Plan

Academic skills are research skills

- Academic skills are fundamentally research skills.
- Each skill (reading, writing, finding information, and so on) is just one part of the research process.
- Therefore, training you in academic skills is ultimately training you to be a better researcher.

What is the research process actually like?

Naive view of research:

1. Find a topic
2. Pose a research question
3. Collect sources
4. Read sources
5. Think a little bit
6. Write something

What is the research process actually like?

Actual process of research:

- Not linear!
- All the previous steps happen...
- ...but often feed back into each other.
- Research question changes as you read sources.
- Need to collect new sources and read them while writing, in order to strengthen arguments.
- Research question will change and improve while writing.

Plan

Know your role and your audience's role

- Before beginning your project, think a minute about your role.
- Are you explaining something to a technical audience, or to a non-technical audience?
- Knowing this will help you frame the project appropriately, pick relevant sources, and find the right style for writing.

Know your role and your audience's role

- Important to know why you are (or will be) writing something.
  - Writing to entertain the reader
  - Writing to help the reader solve a practical problem
  - Writing to help the reader understand something better
- Last two are at the core of academic writing.
- A couple points:
  - Writing for a class, you should be aware of the expectations for writing for that class.
  - For a beginning class, it's best to assume you are writing for a general audience (even though your professor is a specialist).
  - More advanced classes, you can assume a more specialized reader.

What is a topic?

- Starting point for your research.
- Specific statement of what your research is about.
- Helps direct your research so that it remains focused.
- A more specific topic helps you identify what to read and what not to read!
- Note: A topic is not just a subject that you are interested in! More specific!

Bad examples of a topic

Syntax of adjectives

Semantics of mass nouns

Vowel harmony

Better examples of a topic

An analysis of the syntax of relational adjectives in Romance using Role and Reference Grammar

A formal theory of the semantics of mass nouns in English and German using Link's theory of plurality

An study of vowel harmony in Quebec French and how its use is stratified by social class

Topics

- A bad topic can become a better topic by adding words.
- Words such as *analysis*, *study*, *formalization*, *theory*, *description*, *comparison*, and *develop* are good ways to turn linguistics subjects into topics.
- Warning: You do not want to make your topic too specific! You will have trouble finding relevant research for it.

Finding a topic

1. Have one assigned from your advisor. (Boring!)

Finding a topic

2. Old journals and volumes
   - Skim older papers and chapters.
   - Can an old problem be recast in a more modern framework?
   - Can an old theory be made more elegant?
   - Could an old analysis be applied to old data?
   - Could an experiment be redone in a different way, with different subjects?
   - Is there a problem posed by old papers that's still not solved?
   - Look at the squibs or short articles sections from older issues of journals.

Finding a topic

3. Class reading lists or other sources
   - Revisit reading lists from class.
   - Use the critical thinking skills we will discuss next time to approach papers again.

Finding a topic

4. New data
   - Find some interesting puzzle in your native language that hasn't been explored. What could this data be used to shed light on? Is there an analysis of this data already?
   - Or, figure out the grammar of an obscure language. (Libraries are packed with descriptive grammars.)

Finding a topic

5. Questions about a topic
   - Make a list of questions about a topic that need to be answered.
   - Trying to answer the questions helps you figure out what's interesting or unknown in the topic.
   - Perhaps the easy work in a topic still hasn't been done yet (lots of constructions have never received syntactic or semantic analysis, for instance).
   - Think more about the questions/comments you had after responding to a paper (more on this tomorrow).
   - If you have a broad topic, think about subtopics of that topic.
   - If you are starting from a research paper, what questions does the paper raise?

Some steps to consider while finding a topic

1. Find a topic specific enough to let you master a reasonable amount of material in the time you have available.
2. Question the topic until you find questions that catch your interest.
3. Determine kinds of evidence your readers will expect in support of your answer (e.g., qualitative data, quantitative data, observations, etc).
4. Determine whether you can find this evidence. (You can't begin unless it is possible to get the evidence in the first place.)

Styles of research: "Top-down" versus "bottom-up" research

Two extreme positions in how to start a research project (in my view):

- Bottom-up research: project starts by investigating a piece of data.
  - Start with an observation
  - Develop an analysis in light of the observation
  - Consider what theoretical consequences the observation would have
- Top-down research: project starts by investigating a theory.
  - Start with a theory
  - Try to find data that would support the theory or provide counter-evidence for it
  - Try to expand the coverage of the theory to something different
  - Unify two theories

(Of course, many projects lie somewhere in the middle.)

Top-down versus bottom-up research

- Bottom-up:
  - Pro: Easy to start working, can do a lot of work very quickly.
  - Con: Can sometimes be hard to state why the problem you started working on is important.
- Top-down:
  - Pro: Easy to find relevance for a problem. Theoretical results (can be) easier to sell than mainly descriptive results.
  - Con: Need to have a sharp eye for gaps in existing research. Need to know the existing research quite well.

Moving from a topic to a research question

Add focus to your topic with a research question

- Ask open ended "why" and "how" questions.
- Consider "so what". Why is your topic important?
- Identify some questions that might be engaging that you can further explore.

Moving from a topic to a research question

Determine and evaluate the research question

- What aspects are you going to explore?
- Is your question clear?
- Is your question focused and specific enough to cover in the space available?
- Is your question complex enough to be interesting?

Moving from a topic to a research question

Hypothesize

- If you're making a new argument, what do you want to say?
- Why does your argument matter? What big picture question do you address, even in a small way?
- How might others challenge your argument?
- What kind of sources and data will you need to support your argument?

The hardest question to answer: so what?

- The hardest question for a researcher to ask is: so what?
- Beyond your own interest, need to think about why something is worth talking about.
- What will be lost if we never talk about the topic?
  - What will be lost if we never measure F0 in questions in native German speakers in Düsseldorf?
  - Why should we study the lexical semantics of *blue*?
  - Should we care that English *gift* and German *Gift* are false friends?
- Maybe good answers to these, maybe not.
- Important part of coming up with a topic is the question that you will be addressing.

Helping to answer the hardest question

1. Name your topic: "I am studying X..."
2. Add an indirection question: "...because I want to find out whether/how/why..."
3. Motivate the question: "...in order to show that..."

Kinds of evidence

- After you have narrowed down your topic, you can begin thinking of what kind of evidence will address it.
- This is not specific evidence for an argument! Merely thoughts about what sorts of things will address your topic!
- Examples:
  - Research papers in a particular area
  - Corpora
  - Grammars
  - Experiments
  - Acceptability judgements
  - Naturalistic examples
  - ???

Example: Name your topic

1. I am studying mass nouns in Hungarian.
2. I am looking at role adjectives in English.
3. I am measuring vowel height in German speakers.

Example: Add a question

1. I am studying mass nouns in Hungarian, **because I want to know whether Hungarian has object mass nouns**.
2. I am looking at denominal adjectives in English, **because I want to find out why they have different interpretations than their underlying nouns**.
3. I am measuring vowel height in German speakers, **because I want to show that older speakers have a lower [a]**.

Example: Motivate the question

1. I am studying mass nouns in Hungarian, because I want to know whether Hungarian has object mass nouns, **in order to argue against Rothstein and Landman's recent claims regarding mass nouns.**
2. I am looking at denominal adjectives in English, because I want to find out why they have only role interpretations of their underlying nouns, **in order to formalize the distinction between roles and individuals.**
3. I am measuring vowel height in German speakers, because I want to show that older speakers have a lower [a], **in order to prove that there is a change in progress in speakers in the region.**

Topic questions

- If you're more familiar with your field, you might start with a question first.
- More familiarity with the field will lead to better questions.
- Beginning researchers should ask themselves periodically what their question is, though.
- Have other people ask you why this topic.

- You will probably revise your topic as you read more.
- That's ok!
- Topic shouldn't be completely set at beginning of project.
- As you read, you'll get a better understanding of the issues, and how to frame the topic.

Exercise: Developing a topic

- First, think of a bad, overly general topic.
- Then, come up with more specific topics based on it, including questions they address.
- Finally, think a bit about what kind of evidence one would need to search for to begin addressing it.

Example: Clarity in research questions

Unclear: Why are social networking sites harmful?

Clear: How are online users experiencing or addressing privacy issues on social networking sites like MySpace and Facebook?

Example: Focus in research questions

Unfocused: What is the effect on the environment from global warming?

Focused: How is glacial melting affecting penguins in Antarctica?

Example: Complexity in research questions

Too simple: How are doctors addressing diabetes in the U.S.?

Appropriately complex: What are common traits of those suffering from diabetes in America, and how can these commonalities be used to aid the medical community in prevention of the disease?

Exercise: Improving research questions

Come up with some bad linguistics research questions (unclear/unfocused/too simple), and then make them better.

Plan

What types of research are there?

Exercise: How do these books and papers differ?

Types of research

- Books: textbooks, monographs, edited collections, conference proceedings
- Articles: Original research articles (journal articles), review, opinion, handbook

Finding research

How do I find research relevant to my project?

- Goal: finding original research articles or books.
  - Journal articles
  - Papers in proceedings
  - Papers in edited collections
  - Monographs
- Your professor will probably have suggestions for things to read.
- Using bibliographic databases
- Find the papers that a paper that you know cites.
- Find papers citing something you know is relevant.

Difficulties

What difficulties have you had in finding relevant sources for research projects (in class or elsewhere)?

Reference spawning

- Most important way of finding research for your project is to spawn references from other works.
  - Other articles
  - Textbooks, review articles, handbook chapters
- Make a note of references in the introduction and conclusion; these are usually background information for the paper and help set the scene.
- See what other works the paper cites (forward citations).
- Or, see what other papers cite the paper you already have (backward citations).

Searching online

- One method: typing technical keywords into Google to find other papers.
  - Example: `"intonation" "exclamative" "semantics"`
  - Not particularly recommended.
  - Google search doesn't index journals very well (or they just don't usually appear high in search results).
  - Need to know some fairly precise keywords in order to get anywhere close to finding hits that are reasonable.
  - Warning: Google sometimes will "fix" things that it thinks are mistakes. Use quotes if you do this.

Searching online

- Better: Google Scholar
  - Easy to search for a paper you already know.
  - (Often) indexes authors, so you can find other work by the same author.
  - You can also see papers that cite the thing you searched for, and search within those results.
  - This is a good way of finding related papers as well.

Library research

- If you don't have a library card yet, you should get one!
  - Walk to the back of the main library, to the service desk.
  - You will need to give them some information. Bring your student card.
- Library check-out is self-service. Follow the directions on the self-service scanning machines.

Library research at HHU

- The library has a search on their website (of course).
- When you find something, make sure you note which library it is at!
- In addition to the main library, there are also smaller libraries in 23.31 and 24.21 that have linguistics books.
- These libraries are also not open the same hours as the main library.[1]
  - Open 09-20h
  - But, after 16h the information desk closes and you cannot check out books.
  - Also closed on weekends.
- Unfortunately, the library is not infinite: there are many books, journals, and other works that the library does not have access to. In that case, you should use the library's interlibrary loan system to find what you need (`https://www.ulb.hhu.de/ausleihen-und-bestellen.html`).

[1] `http://www.ulb.hhu.de/ueberblick-gewinnen/oeffnungszeiten.html`

Accessing materials from off-campus: journal log-in

- For journals that the university library subscribes to, it is possible to "log in" to the journal from off-campus.
- The journal will have a place for you to search for HHU, and then will take you to a university-managed login screen. After login, you'll be redirected back to the journal.
- The location for this changes for different journal publishers.
  - Elsevier: go to "Sign In", then "Other Institution" and search for "Heinrich Heine University Duesseldorf".
  - Springer: Go to "Log in", then "Log in via Shibboleth or Athens". Find "Heinrich-Heine-Universität Düsseldorf" under the menu for Shibboleth sign-in.
  - Wiley: Use the "Get Access" button (from the article's page) or the "Log In" link. Then, search for "Heinrich Heine University Duesseldorf" (if you don't see a search box, click the link for "Institutional login").
  - de Gruyter: Use the "Get Access to Full Text" button, and then click the link below "Access content through your institution".
  - Other journals will often have similar sorts of options.

Accessing materials from off-campus: journal log-in

- Remember that there are many journals and books that the library doesn't have access to.
- It's possible that even after logging in, you won't have access to the article.
- In that case, review the library's interlibrary loan page for information on how to get access.
- Also, Google searches often help here, once you know what to search for.
- Try searching for the title exactly on Google Scholar.

Library search

- Library search isn't only for finding things you already know.
- You can discover new books by using the keywords in the search.
- Related books also tend to be shelved next to each other.
- When you check a book out, look at its neighbors.

Bibliographic databases

- Databases catalog journal articles and books
- Allow searching by keyword, author, title, etc...
- Often allow complex searches using Boolean operators (AND, OR, NOT)
  - keyword1 AND keyword2 AND author1 OR author2
- ULB provides a few links to databases relevant for linguists.
  - Go to "Datenbanken" from the ULB start page
  - Then "Allgemeine und vergleichende Sprach- und Literaturwissenschaft"

Bibliographic databases

- The "Bibliography of Linguistic Literature" is good.
  - Must be on campus or using the HHU VPN to get full access.
  - But, not comprehensive. Missing references.
- The "Online Contents Linguistik" is also not bad.
  - Also missing references (but not always the same ones as BLL).
  - Also doesn't catalog proceedings papers, while BLL does catalog them occasionally.
- Pro: Can easily find related papers by browsing keywords.
- Cons: Not usually comprehensive, and search engines offer better *general* search tools.

Exercise: Using bibliographic databases

Exercise: Find some relevant works to the topic you developed earlier using one of the linguistic databases.

- First, try to find a relevant paper just by doing free text searches or author searches (if you know someone who has worked on the topic).
- Then, using the keyword classification from a relevant paper, do additional searches using that keyword.
- Find 3-4 relevant journal articles on the topic and make a note of them.

Exercise: Finding papers

Exercise: Take the references you found from your database search, and try to find them.

- Start by trying to find the journal on the library website.
- Or do a search on Google Scholar for the paper.

Exercise: Finding citations

Exercise: Using Google Scholar to find works.

- Use Google Scholar to help find a citation from the paper.
- Use Google Scholar to help find papers that cite the paper you have.
  - Experiment with narrowing the search to articles published after/before a certain date.
  - Conduct a search within the papers that cite your paper.

Other websites?

- The websites of authors and labs
  - e.g., my CRC project: `http://www.sfb991.uni-duesseldorf.de/en/c10/`
- Paper repositories
  - Semantics Archive, Lingbuzz
- Research projects and theoretical frameworks
  - e.g., `http://projects.illc.uva.nl/inquisitivesemantics/papers/publications`

Other websites?

- Oxford Bibliographies
  - Maintain annotated bibliographies written by experts
  - References to important works with descriptions
  - Unfortunately, HHU doesn't have a subscription.
- Wikipedia?
  - Articles have references at the end, which is useful for building a reading list
  - Articles are of varying quality, sometimes the editor for an article has a viewpoint they want to press
  - Article authors/editors are sometimes not particularly diligent about citations

Other resources

- Glottopedia: `http://www.glottopedia.org`
- World Atlas of Language Structures (WALS): `https://wals.info`
- Ethnologue: `https://www.ethnologue.com`

What is my process?

- Look at the introductions and background sections of a few papers that look relevant.
- Make a list of **all** the citations, noting which ones seem to be important (e.g. cited in all the papers, or are given special attention by some)
- Find the papers and read their introduction and background sections.
  - If the paper is older (before the 1990s or so), I use Google Scholar to see who has cited it. In the early stages of a project, I will often search only recent citing papers (newer than 2010, perhaps).
  - If the paper is new, I also make a list of citations from that paper and repeat this process.
- By doing this repeatedly, I'll have a picture of what the major and minor papers in an area are.

Types of sources

Traditionally, three types of sources in academic work:

- **Primary sources**: "original" materials and raw data that you use as evidence.
- **Secondary sources**: provide analysis of primary sources, arguments that build on primary sources. Often called the literature of a field. Usually peer-reviewed.
- **Tertiary sources**: summarize, synthesize, and evaluate secondary sources for a general audience (laymen) or a non-specialized audience

Types of sources

Examples in linguistics:

- **Primary sources**: corpora, grammars, WALS, Ethnologue
- **Secondary sources**: most books, journal articles, conference papers you will read
- **Tertiary sources**: Wikipedia, textbooks

Determining relevance of a source

How do you evaluated whether a source is relevant for your project?

- Skim index for keywords, then skim pages
- Skim first and last paragraphs in chapters
- Skim prologues, introductions, summary chapters, etc
- Skim last chapter, especially first and last pages
- Skim editor's introduction (if in a collection)
- Check bibliography for titles relevant to topic
- Read abstract
- Skim introduction and conclusion
- Skim section headings

Determining reliability of a source

- Is the source published or posted online by a reputable press? (University presses, major journal publishers, major journals)
- Was the article or book peer-reviewed?
- Is the author a reputable scholar? (PhD helps, but isn't a guarantee!)
- If the source is online, is it sponsored by a reputable organization? (e.g., linguistics: WALS, Ethnologue)
- Is the source current and relevant? (This is hard to gauge by itself; check to see who cites it.)
- Does it have a bibliography? (No bibliography usually means low quality research.)

Prioritizing sources

Prioritize readings.

- Journal articles, especially from the well-known journals in your field, should be at the top of your reading list.
- Papers from good conferences should also be prioritized.
- In some areas of linguistics, books are still important. But, book quality varies a lot.
- Good stuff *does* get published in lesser-known journals and conference proceedings, but a lot of mediocre stuff does as well.

Prioritizing sources

- Low priority: tertiary sources. Although these may help you while building your research topic, they will not be important in forming your arguments.
- Low priority: other websites. Not usually strong sources.
- Also keep in mind research reputation.
  - Some researchers have a reputation for good work. Read them first. This is most helpful if you already know a field.
  - Same with some research groups.
  - Again, reputation doesn't always mean something is good, but people develop reputations for a reason.
  - Ask your advisor who good people to read are, or what labs/research groups are doing good work.

Plan

Types of writings

Different types of writings

- Original research (theoretical results, experimental results)
- Handbook articles
- Survey papers
- Book reviews
- Monographs (one author)
- Dissertations
- Edited collection (multiple authors)
- ???

Reading research

You are probably reading wrong. It's not your fault.

- Reading academic work is different than reading non-academic works.
- But, nobody told you how to read academic works.
- It's possible to learn this skill.

What problems have you or do you still face in reading in linguistics?

Metaphors in reading

It can be useful to think of academic works in terms of metaphors.

- Citation lineage
  - Long line of people who have worked on a topic
  - Everybody tried to say something relevant, and their knowledge was built on what came before.
  - How has the history of the topic changed over time?
  - Are there groups of people who share similar views?
- Conversation spanning time and space
- A party where you don't know anyone: who dated whom, who doesn't get along, what happened at other parties...
- Enemies and allies
- Foreign language class

Different types of reading

You probably won't read all papers the same way. Different goals when you read different papers. Some goals:

- Complete understanding
- For class (often the same as above)
- For the data
- Skimming
- Learning the formalization
- Learning about an experimental/computational method
- Finding citations

What nobody told you

- These different goals for reading let you read in different ways.
- Not everything is read the same way.
- There are strategies for reading to get more out of what you read.
- Reading linguistics, you want to be an active reader and think about what is happening in the paper as you read it.
- Helpful for this is understanding how papers are put together.

Exercise: How are linguistics papers structured?

Exercise: With a partner, create an outline of the papers you brought to class today, noting sections and subsections (and subsubsections, if there are any). If it helps, also put a note in your outline of what is discussed in each section. Next, determine whether you have primarily a theoretical, computational, or experimental paper (or even some other type). Then, discuss the structure of the papers with your partner, especially considering these questions:

- What are the similarities and differences between the two papers in their structure?
- Do you think the structure of the paper follows the usual conventions in the field? Why or why not?
- Do you find any unusual ways in which the paper is structured?
- Could the papers work with other types of structures? (What would happen if you moved one section before another?)
- Email outline to me: `andersc@hhu.de`

Usual types of paper structures

- Paper structure often depends on what type of paper it is
- Theoretical and experimental papers have grown to have different traditions in how they are structured.
- Different fields have different standards for what a paper looks like.

Prototypical theoretical paper structure

- Introduction
- Full description of the data
- Theoretical background, literature review
- Criticism of previous approaches
- The author's analysis
- Discussion, conclusion

Prototypical experimental paper structure

- Introduction and background
- Literature review
- Experiments
  - Experiment design, stimuli
  - Participants
  - Results, discussion
- Discussion, Conclusion

- Other types of paper structures can exist as well (computational linguistics?)
- As you read in your field, you'll gain a better understanding of how different papers tend to be structured, where to find certain information, etc.
- Familiarity with how papers in your subfield are usually structured helps you read more quickly, more efficiently, and get more out of the paper.

Each section of a paper contributes something

- Abstract and introduction:
  - Help the reader find out what the paper is supposed to be about.
  - Make the problem seem interesting and important.
- Data sections:
  - Show what the data the paper is dealing with looks like
  - Way of telling the reader what the paper will try to accomplish
  - Way of telling the reader in advance what evidence will be used for a claim.
- Background and literature review:
  - Links the paper to previous research
  - Provides a critical view of earlier research.
  - Sets the scene for the paper.
  - Usually begins with early works and moves to later work.
  - Show steps to solve the problem introduced in the introduction (good papers have a plot!)

Each section of a paper contributes something

- The experiments and the analysis:
  - They are the novel contribution of the paper.
  - Show how author is solving the problem introduced in the introduction.
  - Some further breakdowns:
    - Analysis will often be broken up into a discussion of the theoretical tools, and then the analysis developed piece by piece with supporting evidence for each piece.
    - Experiment sections are almost always broken down into sections explaining the methodology, the participants, the results, and then discussing the results.
- The discussion is where the author tries to wrap up the story of the research, and how the findings in the paper fit in to a larger narrative in the field.
- Conclusion restates what was found in the paper.

How to read a paper

Initial stages of reading a paper:

- Read the introduction of the paper, and take a minute to think about what the author will try to do in the paper (e.g., what arguments the author might have, what technical tools will be used, what languages the author might use to make an argument...)
- Read the abstract, introduction, and conclusion first to see what the author thinks they accomplished.
- Skim the paper first before reading it word-by-word.
  - Look at the major section headings to get a general idea of what the paper layout is like.
  - Skim the first paragraph or two of each section to see what the section is about.
  - Glance over the example sentences to see if you're familiar with them already. (They tend to be reused within areas of research!)
  - Take a look at who is cited to see if you recognize the references.
  - Look at the formalization to see if there are things you recognize.

How to read a paper

Middle stages:

- Summarize or outline while reading.
- Make notes in the margins! Underline and highlight stuff!
- Look for tensions in an argument.
- Make connections to other things you know about from your research or the course.
- While reading, try to think critically about the paper.

Critical reading skills

Some ways of thinking critically:

- Ask questions and be willing to wonder about a problem. Always be asking why something is the way it is.
- Think about how problems are defined.
- Think about the evidence for a claim. Is it reliable?
- Analyze assumptions. List the evidence for each assumption. Can some assumptions be done without?
- Don't generalize from too little evidence.
- Consider other interpretations of the data.
- Has the author addresses the goals they laid out in the introduction?
- Tolerate uncertainty. Be ready to accept incomplete or tentative answers when the evidence isn't wholly available.

Lost?

- You are not expected to know everything in a paper! It's natural and expected to be lost or in unfamiliar territory when reading.
- While reading, look up unfamiliar terms if possible (such as in a handbook or linguistics glossary: search Google for `linguistics glossary` and a few show up that are quite good). (Especially Glottopedia!)
- Or, try to figure them out from context.
- Compartmentalize unfamiliar terms.
  - You might not know exactly how the term is used, but you now know something about where it can be used.
  - (Applied distributional semantics?)
  - A quote (about listening to talks in mathematics, but applies just as well here):

How to read a paper

> *Here's a phenomenon I was surprised to find: you'll go to talks, and hear various words, whose definitions you're not so sure about. At some point you'll be able to make a sentence using those words; you won't know what the words mean, but you'll know the sentence is correct. You'll also be able to ask a question using those words. You still won't know what the words mean, but you'll know the question is interesting, and you'll want to know the answer. Then later on, you'll learn what the words mean more precisely, and your sense of how they fit together will make that learning much easier. The reason for this phenomenon is that mathematics is so rich and infinite that it is impossible to learn it systematically, and if you wait to master one topic before moving on to the next, you'll never get anywhere. Instead, you'll have tendrils of knowledge extending far from your comfort zone. Then you can later backfill from these tendrils, and extend your comfort zone; this is much easier to do than learning "forwards".*

(`http://math.stanford.edu/~vakil/potentialstudents.html`)

After reading a paper

- After finishing reading a paper, you should reflect on what it said.
- Some questions you can consider. (Not exhaustive.)
  - What's good, cool, new, or provocative about the author's proposal?
  - Are there any theoretical or empirical drawbacks?
  - Does it make the right predictions for your native language or another language you know?
  - Can it be extended to cover new generalizations?
  - Is it undermined by any observations?
  - What would happen if you used different assumptions that the ones the author assumes?
  - Can you do the same things the paper does in some other framework?
  - Is it compatible with standard assumptions? What predictions does the theory make about other phenomena?
  - Does it affect theoretical views that are worth respecting?
- You should be considering questions of this sort after (and during) every paper you read.

Some other strategies for reading

- "Four Step Approach"
- "Three pass approach"
- Give yourself assignments while reading

Four Step Approach

Engage with a paper four different ways in order to get more out of it.

- First time reading the paper, skim the paper for main ideas.
- Second time reading, read it completely, and annotate the arguments in the paper (using highlighters, notes, etc). This will be the most time-consuming part of reading.
- Then review what you've done. Answer any questions you made to yourself, and make sure you understood anything that was confusing.
- Respond to what you've read. Write about it, or talk about it with others.

Keshav's "How to read a paper"

- Another method for reading a paper that contrasts with reading it straight through.
- Read paper three times, but different parts and in different ways.
- Don't need to read a paper in full all the time.

Step 1: Bird's eye view of a paper

Steps (5-10 minutes)

1. Read title, abstract, introduction
2. Read the section and sub-section headings, ignore everything else
3. Glance at mathematical content to determine theoretical foundations
4. Read conclusions
5. Glance over references, noting anything you've already read

Step 1: Bird's eye view of a paper

Should be able to answer these questions at the end of the first pass:

1. Category: What type of paper is it?
2. Context: Which other papers is it related to? What conversation in the field is it addressing? Which theoretical bases were used to analyze the problem?
3. Correctness: Do the assumptions appear to be valid?
4. Contributions: What are the paper's main contributions? (As claimed by the author)
5. Clarity: Is the paper well written?

Step 1: Bird's eye view of a paper

- Possible you might not care about the paper after this (not interesting, not accessible to you, stupid assumptions).
- Writers: Expect your readers to only make one pass over a paper!
- Importance of choosing coherent section and sub-section titles
- Importance of writing concise and comprehensive abstracts

Step 2: Reading the paper with more care

Read the paper with greater care, but ignore details like proofs

- Jot down key points
- Make notes in margins
- Make note of questions you would ask author
- Note terms you don't understand
- Other stuff
  - Look carefully at figures, diagrams, illustrations, graphs. Are they properly labeled? Have error bars? Sloppy v. careful work
  - Mark relevant unread references for further reading
- This should take an hour or two for an experienced reader
- Should be able to summarize main idea, with evidence.

Step 3: Attempt to recreate the paper

- Attention to detail!
- Understand completely the authors' assumptions and how they get to their conclusions.
- Challenge every statement.
- Compare their approach to what you would do.
- Many hours
- Be able to pinpoint problems, missing assumptions, missing lit, problems with experiments, etc.

Exercise: Three pass approach

Use the first step of the three pass approach to read one of the papers you brought, and make notes of what you find out about the paper.

Three pass method for literature review

Three pass method for doing a lit review:

- Use Google Scholar, CiteSeer, or something else to find 3-5 recent highly-cited papers in an area (choose keywords carefully)
- Do one pass on each paper to get a sense of the work, then read related work sections. You might even get lucky and get a pointer on a survey paper.
- Second, find shared citations and repeated author names. These are the key papers and researchers. Download the papers. Go to authors' websites and see what they've published recently, and in what journals.
- Third, visit these journals and look through recent issues/proceedings. Identify related work.
- These papers, plus the ones from earlier, are the first version of your survey. Make two passes through these, and get any key papers you missed.

Another approach: Reading assignments

Another way of engaging with the paper: have some assignments for yourself while reading the paper.

- Reflect on the abstract. Examples:
  - Is what the author is trying to do reasonable?
  - What challenges might there be in trying to accomplish it?
  - What arguments or evidence might the author use?
- Reflect on the title of the chapter or section for a minute before reading it. Examples:
  - How does the title fit into the larger work?
  - What aspects of the argument is the author going to introduce in the section?
  - What kinds of data might the author bring up?
  - Is the author going to provide support for their own argument, or argue against a previous argument?

Reading assignments (cont'd)

- Evaluate the argument and write about it.
- Write about connections to other academic works.
- Identify the citation lineage.
  - Who does the author cite?
  - What sides are there to the issue?
  - Does the author take a particular side, or advance a new point of view?
  - How does the analysis the author proposes relate to other analyses?
- Free write about the work after reading it. Possible topics:
  - How would you explain the idea to someone else?
  - Do you agree with the author's approach? Disagree?
  - Were there any unsolved questions?
  - How would the paper deal with data from a different language?
  - Can the analysis be extended to other phenomena?

Understanding technical aspects of linguistics

- Most areas of linguistics are quite technical. You will need to learn how to deal with technical results, including and especially those that you don't understand right away!
- It's rare for **anyone** to completely understand technically advanced at first glance. It always takes time to process.
- Some tips:
  - If you encounter something technical, don't panic; don't immediately skip it, but don't believe that you have to stop everything to understand it either.
  - Attempt to decipher any bits of formalization that you are familiar with.
    - If you can't figure it out, perhaps the author explains the notation in the paper.
    - Otherwise, look in a reference or textbook.
  - Look at the nearby text. Does it give any hints? Often the prose will explain things.
  - Can you substitute things you do understand into (parts of) the formula? How does it interact with other things the author has given?
  - If you're still unable to understand it, put a note next to it and move on, using the explanation from the text as your understanding. Come back to it later.
- One weird tip: rewrite formalization you don't understand, especially somewhere big, like a whiteboard or chalk board.

Getting things out of talks: the Three Things exercise

- Method of actively engaging with the content of a talk.[2]
- Theory: If you get three (small) things from a talk, it was a success. If you didn't, the talk was not a success.
- How it works:
  - On a sheet of paper or note card, have three things (and only three things) written down at the end of the talk.
  - These can be anything: definitions, interesting problems, examples, questions you want to ask the speaker, questions you want to ask your advisor... anything.
  - As you listen to the talk, write interesting things down on your paper or note card.
  - Once you have three things and want to add something else, **you must cross out one of your three things to make room for the new thing.**
- Crossing out makes you process the information more, making you more likely to retain it.

[2] From `http://math.stanford.edu/~vakil/threethings.html`

Thinking critically about a paper

You want to be able to not just read articles, but think about them critically afterward.

- How does this piece fit into the larger conversation in the field?
  - How does this piece address a gap in the field's understanding?
  - Is there a conversation happening? What side does this piece take?
  - Is there any background this piece is missing?
  - Does it have the right background?
- How does the argument work?
- How does the analysis work?
  - What theoretical machinery is used in the analysis?
  - Is it the right kind of machinery for the task at hand?
  - Is the machinery novel or familiar? Is it like someone else's analysis?
  - Does the analysis account for the data?
  - Is there data the analysis doesn't account for?
  - Are there bits of the analysis you don't understand?
- How do the experiments work?
  - Do the experiments test what they author says they test?
  - Are they appropriate for the phenomenon being looked at?

Final thoughts on reading

- Read regularly, to get practice.
- Set aside time for reading instead of doing it all at once.
- Find out what people in your group are reading.
- Sometimes it helps to read with other people.
- Time can help: sometimes skimming something and then returning to it later helps make it more accessible to yourself.

Plan

Taking notes

What to take notes on?

- Anything that might be important!
- Major sources of agreement, disagreement.
- Author's arguments.
- How the arguments work (what steps you use to make the argument)
- Evidence for the author's claim. Linguistic examples that will be useful for your own work.
- Your own reactions to things in the paper.
- Particulars of a formalization.
- Particulars of an experimental design.
- In your notes, include the full citation to the paper as well, so that you can find it again! (Citations on Thursday)

Summaries, paraphrases, and quotes

- Summary: In your own words, a brief restatement of what the author has said.
- Paraphrase: In your own words, a precise restatement of something specific the author has said.
- Quote: The author's own, exact words.

Summaries, paraphrases, and quotes in your notes

Quoting, summarizing, paraphrasing:

- Summarize when you only need the point of a passage.
- Paraphrase when specific words are not as important as meaning.
- Exact quotations:
  - Quoted words are evidence that back you up.
  - Words are from an authority you want to challenge.
  - Words are strikingly original or compelling.
  - Want to state claim exactly.
- When you quote and paraphrase, make a note of where in the text the passage was (the page number), in order to note plagiarize in the future.
- Context! When you quote, paraphrase, summarize, make sure you have the context right.
- Also, don't mistake the views of writers!

Other notes on notes

- Take notes in the margins of papers, underline things in papers, highlight. Put printed papers in a binder for later use.
- Helpful to take notes on computer.
  - Some people use word processor to format different points.
  - I find this distracting to myself, personally, so I often use plaintext with markup that can be interpreted to make something prettier (Markdown).
  - Some people also use note-taking systems (Evernote)
- Helpful to take notes by hand as well. Start a research journal and take notes of papers in the journal.
- Better retention for things written by hand...
- Helpful to begin writing sections of your paper as you are taking notes, especially the background section.
- Again, clearly distinguish between your own thoughts, summaries, paraphrases, and quotes!

Annotated bibliography

- Annotated bibliography is also another way of keeping track of citations plus a summary of what the paper is about.
  - It's a reference list like you might find at the end of an article...
  - But each reference also has a short description of the paper.
- "Write a concise annotation that summarizes the central theme and scope of the book or article. Include one or more sentences that (a) evaluate the authority or background of the author, (b) comment on the intended audience, (c) compare or contrast this work with another you have cited, or (d) explain how this work illuminates your bibliography topic." - `http://guides.library.cornell.edu/annotatedbibliography`
- E.g., write critically about the work using the critical thinking skills we discussed yesterday.
- Where/how to store?
  - Long file you build up in your word processor.
  - Or, store annotations alongside citations in your citation manager.
- **You should be doing this for your research. It will help you not have to read things over and over again.**

Organization: Personal bibliography

- As you read, you will need to organize papers you've read and are important to what you're working on.
- You can put papers in your project folder:
  - Put papers you've read that are important for a project in a folder with other project materials.
  - Papers always associated to that project by virtue of being in the same folder.
  - Downside: when you have more projects, you will wind up duplicating some papers.
- More general solution: have a master bibliography for yourself that includes everything you have cited or might cite some day.
  - Add papers to your master bibliography as needed.
  - One folder for all your papers. No duplicating files.
- Add to your personal bibliography **as soon as you read something**. You want to be able to find the reference easily later.

Citation managers

- Citation managers: software that keeps track of citations for you.
  - Examples: Zotero (`https://www.zotero.org`), Mendeley (`https://www.mendeley.com`), Papers, BibDesk, Jabref
  - Many provide way of automatically filing and managing PDFs and other files (like how iTunes manages songs)
  - Can keep track of papers using customizable tags for searching for papers quickly.
  - Search your papers by title, author, date, journal, etc.
  - Automatically get paper metadata (title, author, date, journal, etc.)
  - Automatically generate properly formatted citations (some even integrate into Word).
  - Automatically back up your library and citations.

I highly recommend building one master bibliography for yourself and managing it using software. (I use BibDesk, which integrates with the typesetting software I use.)

Plan

Building an argument

- Every linguistics paper that is proposing something new is building an argument.
- Most things you will write as part of your academic life (theses, term papers, squibs, articles) will be extended arguments for some particular view of the world you have.
- You will need to learn how to build arguments that can be understood by other linguists.

Argument forms

- Arguments come in different logical forms.
- Deductive argument: the conclusion follows directly from the premises.
- Inductive argument: argument from observations (a sample) to a generalization
- Abductive argument (inference to the best explanation)

Deductive argument

- Example:
  1. All humans are mortal.
  2. The queen is human.
  3. Therefore, the queen is mortal.
- Truth of 3 follows directly from the truth of the premises, 1 and 2.
- In this sort of argument, if you accept that the premises are true, then you must also accept the conclusion!
- Adding new premises won't change the conclusion.

Inductive argument

- Example:
  1. All the humans I've seen live on planet Earth.
  2. Therefore, all humans live on planet Earth.
- Truth of 2 is supported by the evidence in 1, but not guaranteed (e.g., some humans live on the space station, or might live on Mars some day).
- It's possible to challenge the conclusion in this type of argument even if you accept the premises.
- Adding new premises can change the conclusion.
- Example:
  1. All the humans I've seen live on planet Earth.
  2. But, I know humans can travel and live in space, too.
  3. Therefore, all humans live on planet Earth. (false)

Abductive argument

- Example:
  1. If there were another planet outside Uranus, that would explain its orbit.
  2. Therefore these is another planet outside Uranus.
- Usually have hidden premises.
- (E.g., another planet affects the course of other planets.)
- Defeasible; truth of the conclusion also not guaranteed from the premise.

Arguments in linguistics

- Most arguments in linguistics are non-deductive arguments.
- Rare to find an argument where the conclusions follow directly from the premises.
- Typical argument form in linguistics:
  1. Claim: p is correct.
  2. Assumption(s): If p is correct, then we usually expect q, r, s
  3. Evidence: q, r, s
  4. Conclusion: Therefore, p is correct.
- Assumptions how linguists get from the evidence (linguistic data, experiments) to the conclusion.
- They are the crucial link in making the argument work. Need assumptions to do (most) linguistic arguments.
- Sometimes presupposed by the author, but oftentimes some explanation is given for why they are adopted.
- Assumptions can be implicit or explicit:
  - Explicit: "Following von Fintel (2004), I adopt the 'Hey, wait a minute!' test as a test for presuppositions."
  - Implicit: Experimental design d is adequate to test linguistic knowledge k.

Arguments in linguistics

- Most arguments in linguistics (and science in general) are not deductive arguments.
- This means that any argument can be attacked by attacking the evidence and the assumptions:
  - Attacking assumption: you share a different world-view than the author. Different set of background beliefs about when things will be true.
  - Attacking evidence: you do not necessarily have a different world view, but you believe that particular observations do not generalize to the conclusion. The "what if it's actually this instead?" case.
- Preponderance of evidence: you only convince the reader when there is a variety of evidence that all points to the same conclusion (based on the assumptions).
- This is why linguistics papers have so many examples and tests: to give an overwhelming amount of evidence pointing to the same conclusion.

Arguments in linguistics

Example:

- Assumption: The "hey, wait a minute" test is a valid test for presuppositions.
- Evidence: Use of the "hey, wait a minute" test shows in (1) shows that *sucks* is presuppositional.

(1) John: It sucks that it's raining.
Bill: Hey, wait a minute! I didn't know it was raining.

- Attack on assumption: I do not think the "hey, wait a minute" test is a valid test for presuppositions.
- Therefore, I do not believe that this example can be used as evidence for *sucks* being presuppositional.

Arguments in linguistics

Example:

- Evidence: Example (2) shows that accusative case in English never arises in subject position.

  (2) a. I saw John.
  b. *Me saw John.

- Attack on evidence: There are examples where accusative cases does arise in subject position.

  (3) a. Me and Bill saw John.
  b. John wants me to leave.

Logic of experiments

- This is roughly the same kind of logic used in experimental work.
- Claim = Hypothesis
- Example:
  - Hypothesis: Children use contextual information to compute standards for gradable adjectives.
  - Assumption (implicit): The experimental design is adequate to test whether children use contextual information.
  - Assumption (explicit; prediction): If group 1 and group 2 differ significantly in the experiment, then this supports that children use contextual information.
  - Evidence: Experiment shows that group 1 and group 2 differ ($p < .001$)
  - Conclusion: Children use contextual information.
- Attacks:
  - On assumptions: experiment is not of the right type, or prediction doesn't bear on hypothesis.
  - On evidence: perhaps the experiment was faulty, perhaps the groups behaved differently for some other reason.

Exercise: Examining an argument

Exercise: Skim one of the linguistics papers you brought to class. Think about the following questions as best you can (since I didn't ask you to read the whole paper):

- Where is the author's main claim introduced in the paper?
- Where does the author introduce evidence for the claim?
- Does the author bring up competing hypotheses (their own hypotheses, or those of other authors)?
- Does the author lay out their assumptions anywhere, either implicitly or explicitly?

Linguistics papers

- Most theoretical linguistics papers are structured as a series of arguments that all give support to the main claim in the paper (many papers even have multiple claims).
- Main claim in the introduction.
- Smaller arguments in later sections or subsections.
- Each of the arguments have their own evidence along with them.
- Sections/subsections usually start with a claim, and then example sentences provide evidence for the claim.
- Experiments also support a main claim, via predictions (if my claim is true, then it predicts x in the context of an appropriate experiment).

Steps in building an argument

- State the claim you are making.
  - Be as explicit as possible. There is no room for vagueness. People cannot evaluate your claim unless you are precise.
  - Contextualize your claim. What are the theoretical implications?
  - Does your claim contradict another claim in the literature?
- Make clear any assumptions you are making.
  - Laymen take assumptions to be bad things.
  - However, they're necessary in making arguments. Science is dependent on assumptions.
  - It's not necessarily wrong to assume something if you make clear what you are assuming.
  - You might assume many different types of things in making your argument.
  - Example assumptions one might find:
    - Assume a worldview (e.g., that grammar can be formalized)
    - Assume a framework (e.g., Role and Reference Grammar, generative grammar)
    - Assume a theory (e.g., that the determine is the head of the noun phrase [Abney 1987's DP hypothesis])
    - Assume a solution to a problem in your paper (e.g., the proper word order for your syntax can be generated using movement)

Steps in building an argument

- Introduce supporting evidence.
  - Make sure the data really do support your argument.
  - Make sure the data are relevant to your argument.
  - Some examples of evidence
    - Experimental (e.g., statistically significant result)
    - Judgement (minimal pair of sentences)
- Explain how the evidence you give supports your claim.
  - Explain why the evidence is relevant.
  - Be explicit about why its relevant.
  - Walk the reader through the data.
  - Don't assume anything to be obvious to the reader; explain everything.
- Common additional strategies in building arguments:
  - Develop alternative, competing hypotheses, then knock them down for empirical or theoretical reasons.
  - Use as evidence for your argument successful predictions your theory makes.
    - "My theory predicts that pluralization of these types of nouns in this language should be impossible. Example (24) shows that pluralization is impossible and that this is actually the case, lending support to my theory..."

Opposition

- Linguists love to argue. Anything you say will probably be challenged by someone, either directly or indirectly.
- State opposing arguments to your own fairly. (No strawmen.)
- Defending your own argument requires addressing the content of the opposing claim.
- Tactics:
  - Defend your assumptions more rigorously to show why they are reasonable to adopt.
  - Produce more evidence that directly supports your conclusion.
  - If the opposing claim presents an alternate hypothesis, study it to see why it might not be true (see what predicts an alternate analysis would make), and give evidence that it isn't true.
- You might not ever agree if you have different assumptions.
- Sometimes, an opposing claim might be valid, but there are ways of rescuing your conclusion (ad hoc explanation by pointing out why your examples might be a special case, for instance).

Related: Responding critically to prior research

- Part of doing research is responding to prior research.
- It's likely that someone has worked on your topic before.
- You **will** need to talk about their work, whether you agree with it or not.
- Responding critically to prior research:
  - You shouldn't be afraid to point out flaws in previous research.
  - But, you should be even-handed and honest in your criticism.
  - Principle of Charity: Be as kind and forgiving to other work as possible. Assume the best interpretation of the work
    - (e.g., if something is unclear, try to interpret what the author is saying in the best possible way)
  - When criticizing work, it's often courteous to point out places where the previous analysis is successful as well.
- Reasons to criticize a work that aren't really valid:
  - It's old.
  - It's in a different theory or framework. Work should be criticized based on the predictions it makes and how much it explains.

Other points

- Make learning how to argue a priority: theories change, but methods of argumentation do not.
  - Learn in your field the types of evidence people use for arguments.
  - For example, in (some areas of) syntax, arguments are usually built from evidence including anaphora, constituency tests, islandhood and movement...
  - These are long-standing types of evidence (the papers written in the 1980s use the same types of arguments, even though the theory has changed), and arguments have long been built on these types of evidence.
  - Other examples: certain modifiers (*frequent*) as diagnostic of events, P600 indexing syntactic processing, minimal pair as test for phoneme in phonology, ...
- Best way to learn argumentation is to look at how other authors present their arguments.
  - Observe how they present hypotheses
  - Observe how they present data
  - Observe how they compare competing hypotheses
- Examples

Some mistakes to avoid

- Don't confuse *making* an argument with *having* an argument.
  - Having an argument is a personal disagreement between people.
  - When you make an argument, you're not arguing with someone, but you're providing evidence for a claim.
- Don't use emotional reasoning in your argument.
- Don't present supporting data without explaining why the data support the claim.
  - Be explicit.
  - Don't be confusing.
- Don't argue against a straw man.
  - Straw man: weak or flawed version of someone else's claim that you argue against, instead of their actual claim.
- Don't hedge.
  - Try not to use *I think*, *it seems*, *it appears*, *it might be the case that*, *sort of*, *maybe*, and so on.
  - These undermine your argument.
  - When editing your work, be ruthless about getting rid of them.
- Don't claim something is an argument when it's really an observation.
  - Having data and pointing out something factual isn't an argument.

Plan

Organization: Research

- You will need a way of organizing the results of your research.
- My strategy: each project gets its own folder in my "projects" directory
  - Notes, idle speculation
  - Handouts from meetings
  - Data, stimuli
  - Things I've written
  - Lists of things I plan to read
- If you're writing a thesis, you should spend time each week on activities related to the thesis.
  - Have time each week to do readings for the thesis.
  - If you can, write a little bit of your thesis every day; writing is easier when you do it often.
- For my own research (where I have multiple projects at once), I also have a research notebook where I can keep notes, references, examples, and other stuff.

Plan

Types of writings

Many types of writing in academia. A few you will probably encounter:

- Term papers
- Article review, literature review
- MA thesis, PhD thesis
- Qualifying paper
- Dissertation proposal
- Conference abstract
- Conference paper
- Squib (short paper or even extended footnote)[3]
- Journal article

These types of writings have different structures to them, but there are commonalities between many of them. You'll gain familiarity with how writings are structured as you read more.

[3] See Linguistic Inquiry's Squibs section, or the journal Snippets.

Formatting papers (for classwork)

Typical standards for formatting papers for classwork:

- Normal specifications:
  - A4, 1.5cm to 3cm margins, 12pt Times New Roman, justify text
  - 1.5 line spacing, indent paragraphs, no blank line between paragraphs
  - You should have page numbers with your paper.
- Typically, no cover page for classwork. But, identify your paper.
- Number your section headings. Also, it helps to set them apart in some way. The typical style is to put section headings in **bold** type or in ALL CAPITALS.
- Bold otherwise shouldn't normally be used in the paper.
- No table of contents in a paper (only book-length works, like theses).
- Style guides from linguists at HHU:
  - Löbner: `https://web.archive.org/web/20150501235522/http://user.phil-fak.uni-duesseldorf.de/~loebner/lehre/hausarb/merkblatt.html`
  - Stiebels: `http://www.isi.hhu.de/fileadmin/redaktion/Fakultaeten/Philosophische_Fakultaet/Sprache_und_Information/Allgemeine_Sprachwissenschaft/Dateien/hausarbeit_stiebels.pdf`

Usual types of paper structures

- Paper structure often depends on what type of paper it is (e.g. is it theoretical or experimental).
- Prototypical theoretical paper structure
  - Introduction
  - Full description of the data
  - Theoretical background, literature review
  - Criticism of previous approaches
  - The author's analysis
  - Discussion, conclusion
- Prototypical experimental paper structure
  - Introduction and background
  - Literature review
  - Experiments
    - Experiment design, stimuli
    - Participants
    - Results, discussion
  - Discussion
- Other types of paper structures can exist as well.
- Familiarity with how papers in your subfield are usually structured helps you read.

Each section of a paper contributes something

- Abstract and introduction:
  - Help the reader find out what the paper is supposed to be about.
  - Make the problem seem interesting and important.
  - No mystery novels! State right away in the introduction what you are going to do in the paper. (Also put a teaser in the abstract.)
  - I also like to tease the data some, to provide some interest.
  - Also include a roadmap, something to guide the reader to the structure of the paper.
- Data sections:
  - Show what the data the paper is dealing with looks like
  - Way of telling the reader in advance what evidence will be used for a claim, or even beginning to argue for some claims.
- Background and literature review:
  - Links the paper to previous research
  - Provides a critical view of earlier research.
  - Sets the scene for the paper.
  - Usually begins with early works and moves to later work.
  - Show steps to solve the problem introduced in the introduction (good papers have a plot!)

Each section of a paper contributes something

- The experiments and the analysis:
  - They are the novel contribution of the paper.
  - Show how you are solving the problem introduced in the introduction.
  - Provide rationale for the experiments as well (sometimes this is in the introduction section).
- The discussion is where you wrap up the story of the research, and say how the findings in the paper fit in to a larger narrative in the field.
- Conclusion restates what was found in the paper. Nothing new in the conclusion! Someone should be able to read your conclusion and get a sense of what you did.

Standards in linguistics

- Papers in linguistics have standard ways of presenting certain types of information.
- Provide a common stylistic vocabulary for quickly reading and understanding research.
- You should follow these styles to make yourself understood more easily.

Example sentences

- Typically, example sentences are given in your paper using example numbers.

  (4) John has a book.

  (5) John hat ein Buch.

- Examples should have consecutive numbers throughout the paper.
- The numbers should be surrounded with parentheses. Usually, examples are aligned to the left-margin.
- Sub-examples should use letters.

  (6) a. *This book is a.
  b. This is a book.

- For a theoretical paper, use examples!
- Also, if you directly take an example from someone, it's necessary to cite it, either in the text above/below, or to the right of the example.

  (7) John has a book (Smith, 2004: (14))

Example sentences

- Make reference to examples you introduce in your prose.
- When you introduce an example, you should make it clear what the relevance of that example is to the argument you are building.
- "As we can see in (15), extraction of a wh-word across..."
  "(23) shows that..."
  "Example (19a) and (19b) are minimal pairs, providing an example of how..."
  "Our analysis predicts (16) to be acceptable, contrary to fact."

Examples in the prose

- Linguistic examples in the text should be distinguished from regular text.
- 'Quotes' or *italics* are the preferred way of distinguishing examples.
- When you need to have a foreign language word, put the word in italics with a translation in quotes. (e.g. "One example of a word starting with a consonant is German *Buch* 'book'.")

Examples (more generally)

- The example format is used to represent other types of examples.
- Formulas in formal semantics are usually given with example numbers.

(8) $[\![dog]\!] = \lambda x.\mathbf{dog}(x)$

- So are trees in syntax.
- Definitions are sometimes examples, too.
- In my experience, phonological rules and OT tableaux are also usually given example numbers.
- (Frame diagrams: I feel like they should also be examples, but most people here make them figures.)

Examples in Word

- Don't type that example number by hand!
- You should be using Word's features to automatically number examples (if you're using Word).
- See: `http://sites.google.com/site/wechslerpublications/example-numbering-in-word`
- Doing so otherwise is too confusing and error-prone; you **will** wind up referencing the wrong examples at some point.

Figures and tables

- Images, diagrams, graphics, charts and so on should be figures in your document.
- Figures should have a label 'Figures N' where N is the number of the figure. Additionally, they can also have a caption.
- Do the same for tables, but label them 'Table N'.
- Both figures and tables should be placed near where they are referenced in the text. Reference them in the text as Figure N/Table N.

Glossing

- Foreign language data, if it's in a language unknown to your readers, should be glossed (morpheme by morpheme translation).
  - First line is the foreign language data.
  - Second line is a morpheme by morpheme gloss.
  - Third line is a translation into the language used in your paper.

(9) Mereka di Jakarta sekarang.
They in Jakarta now
'They are in Jakarta now.' (Indonesian)

(10) aux chevaux
to.ART.PL horses.PL
'to the horses' (French)

- If you're writing in English, you should generally gloss any foreign language data, in my view.
- If you're writing in German, you should probably gloss anything that's not English or German, but still give a German translation of the English.

Glossing

- Somewhere in your paper (appendix, first footnote), you should have an explanation of what the abbreviations used in your paper are.
- If it's not apparent, individual examples should also note the language, either on a line above the example, or somewhere to the right of the example.

(11) Mereka di Jakarta sekarang.
They in Jakarta now
'They are in Jakarta now.' (Indonesian)

- There are some attempts at standardizing abbreviations and formatting. For example, the Leipzig Glossing Rules:
`http://www.eva.mpg.de/lingua/resources/glossing-rules.php`

Footnotes

- Effective way of introducing additional stuff that you want to talk about, but doesn't fit in the main text very well.
  - Additional examples
  - Side issues that aren't relevant for discussion
  - Additional references
  - Terminological notes
  - Complications that might distract from your main point
- Opinions on whether to use footnotes or not differ, though...

A few other points

- In general, follow the standards of your subfield. If your subfield tends to do something in papers other subfields don't do, do that thing in your own papers.
- Some things not to include:
  - Typically, quotes are used only very rarely in linguistics papers. If you have more than one quote in your paper, you should think about paraphrasing it.
  - No discussion of how you came to have an idea. Your paper doesn't need to reflect the history of your involvement with the idea, only the outcome.
  - When discussing other work, no discussion that involves the structure of the paper (e.g., "in section 1, Smith proposes that...") or your feelings about how it was written.
- Spellcheck and proofread. Typos are distracting.
- Some other annoying writing habits (from McCaulay's book, *Surviving Linguistics*):
  - Being excessively wordy.
  - Using too many hedges (e.g., *it seems that...*, *I think that*, *maybe*)
  - Citing textbooks.
  - Random facts at the end of paragraphs as an afterthought.
  - Using "assume" when describing the work of other linguistics. (Use "hypothesized", "argued for", and so on.)

Getting started writing

- Outline your paper before starting
  - Write down everything you want to say in the paper first, in no particular order.
  - Impose an order after you've figured out what to say.
  - Use the outline to write your paper.
  - Fill in the outline as you discover things you didn't think of.
- Break larger tasks into smaller, more easily completed tasks.
- Don't worry that what you write won't be good; just write something down.
- Nobody has a perfect first draft. Get your thoughts down as quickly as possible, and come back to revise them later.
- Don't feel obligated to start at the beginning of the paper. Sometimes it can help to skip around and write some sections before others.

Exercise: Writing a (fake) academic paper

Exercise: In your group at your table, write an outline of an academic paper with some supporting text and/or examples in each section, arguing for a side with one of the following topics.

- Are tomatoes fruit?
- Is cereal soup?
- Is a hotdog a sandwich?
- Is shrimp meat?

The paper does not need to be long, but treat it as if you really were writing a paper arguing for a particular view. Make a statement of your claim, cite background research, introduce evidence as it would be introduced in a theoretical or experimental linguistics paper (in the form of examples or experiments), build an argument, and summarize your results. (Naturally, you'll need to be a little creative.) When finished, email the paper to `andersc@hhu.de` so we can discuss it as a class.

LaTeX for Linguists

- LaTeX is a typesetting language used in tandem with a compiler to produce (mainly) PDF documents.
- You write plaintext formatted with lightweight codes (e.g., `\textbf` for **bold** face), which is compiled to produce a document.
- A few benefits (for linguists and other people):
  - Does very well with special characters, formulas, trees.
  - Can be used with bibliographic databases you create to automatically format references.
  - Documents are stored as plaintext (no formatting). The code be read by main programs.
  - The most popular LaTeX distribution are free and open source. Your documents are not tied to Apple/Microsoft.
- Very often used in syntax, semantics, and computational linguistics due to its ability to handle mathematical formulas and its packages for drawing shapes directly in your document.
- More detail is beyond what we can do today, but I have slides on my website to get you started: `http://curtanderson.github.io/latex/`

Plan

Why do we need to cite?

Why are citations important?

- Give proper credit to other researchers.
- Be a good scientific citizen.
- Build an argument by talking about previous work and enter into the scientific conversation (remember the metaphor from Monday!)
- Note which ideas are not yours, which also serves to highlight which ideas *are* yours).
- Show where your data, examples, formulas and so on come from.
- Show basic literacy and knowledge about the state of your field.

Citation styles

Some common citation styles in linguistics (not exhaustive):

- MLA
- APA
- IEEE
- Unified Style Sheet for Linguistics[4]

Your particular subfield might have a preferred style (e.g., APA in experimental areas, IEEE in computational linguistics).

Information about the styles is relatively easy to find online. The Purdue OWL site (at the end of these slides) is a good reference for how to use the MLA and APA styles.

DGfS uses the Unified Style Sheet and the De Gruyter Moulton paper formatting guidelines:
`https://www.degruyter.com/staticfiles/pdfs/mouton_journal_stylesheet.pdf`

[4] `https://www.linguisticsociety.org/sites/default/files/style-sheet_0.pdf`

Two types

Two types of citations in academic works:

- In-text citations
- Works cited/bibliography/references

Both are important!

- In-text citations are how you mark ideas, quotes, formulas, examples, etc as being someone else's work.
- Works cited how readers can track down those ideas.

What do you need to cite?

Anything that is not your own idea.

- Direct quotations
- Facts, data, and information based on other sources
- Paraphrases of other peoples' work
- Interpretations and opinions from other sources
- Charts and graphs and figures
- Pictures and figures
- Raw data
- Comments from lectures, conversations
- Formulas and formalization
- ...(almost) anything that you didn't come up with yourself

What don't you have to cite?

- Your own ideas and opinions about a topic (because they're yours).
- "Common knowledge".
  - Somewhat hard to define.
  - Facts, figures, etc. that are so widely known that it's impossible to find an originating source
  - No debate about the factuality of the claim as well.
  - Common knowledge can differ depending on who your readers are; common knowledge in a linguistics article is different from common knowledge in a newspaper.
  - Example:
    - Humans landed on the moon in 1969.
    - German is a verb second language.

Using citations

- Parenthetical citations (e.g., (Smith, 2004)) are used to mark when something comes from someone else, but without using the name of the author in the sentence.
  "The comparative morpheme *-er* thus appears to take two clauses as its syntactic arguments (Heim, 1985)."
- Parenthetical citations can be stacked: (Smith, 2004, 2008; Tillerman 1999, 2001; Zed 2017)
- Author citations (e.g., Smith (2004)) are used in a similar way, but when you want to mention the author in the text.
  "The comparative examples come from Heim (2006)..."
- There are some other types of citations (such as when you refer to the work itself [e.g., "in Anderson 2017, I discuss..."]) which I won't talk about.

Using citations

- When to use page numbers:
  - Generally, concepts, ideas, opinions, information, and arguments are not cited with page numbers (e.g,, Smith (1994)).
  - Things that provided at points in a work, like formulas, trees, quotes, figures, and tables do get page numbers attached to the citation (e.g., (Smith 1994: 23)).
- Moreover, linguistic examples are sometimes also referred to by example number (e.g., (Smith 1994: ex. 14) or (Smith 1994: (14)))
- If you introduce the author name in the text in the same sentence, you can also omit it from the citation, although it's a little ugly (e.g., "Smith provides evidence for the view that plurals aren't nasalized (1994).").
- Likewise, if you use the same citation multiple times across sentences, you can often dispense with the year and just use the author name.
- Common mistake: giving an in-text citation to an idea, but having a citation that's much newer than the original idea. It gives the impression that the idea is attributed to the new person. Get the original source of an idea if you can.

APA style reference list

- Authors:
  - Lastname, F.
  - Lastname, F., and Anothername, J.
  - Lastname, F., Anothername, J., and Onemorename, S.
- Date: In parentheses. (1992)
- Titles:
  - Italicize book and journal titles
  - Leave article and chapter titles undecorated
  - APA style says to not use capital letters in titles, except when:
    - it's the first word in the title, or after a colon
    - you are preserving capitalization from an abbreviation or initialism
    - it's the title of a journal (capitalize all major words)
- Journals: Also give the volume and issue of the journal in italics.
- Publishers: Give it as Location: Publisher.
- Give page numbers for works in books or journals.
- Articles or chapters in books/proceedings should also list the editors.

A few examples

- **Journal article**:
  Lastname, F. (2004). My title. *Wonderful Journal, 12*(*4*), 224-230.
- **Book**:
  Lastname, F. and Anothername, J. (2004). *My title*. Düsseldorf: Düsseldorf University Press.
- **Article in proceedings/collection**:
  Lastname, F. (2004). My title. In G. Editor (Ed.), *Proceedings of Conference* (pp. 24-26). Düsseldorf: Düsseldorf University Press.

APA style reference list

- Alphabetical order for references in the works cited
- In the case of the same first author for multiple works:
  - Works where the first author is the only author should be listed first.
  - Then, use chronological order for the citations.
  - If the author has two or more publications in the same year, use numbers to distinguish (e.g., (2004a) and (2004b).)
- Works cited should be formatted so that there is a blank line between references
- If a reference is longer than the line, the following line should be indented. (In Word, use the ruler to make a 'hanging indent'.)
- Look at the Purdue Online Writing Center for basic guides to APA citation style (`http://owl.english.purdue.edu/owl/section/2/10/`).

Exercise: Writing references

Exercise: Write a reference for a journal article, a book, and an article in a proceedings or a chapter in a book. Use the examples I brought to class.

Exercise: Reference list corrections

Exercise: Find all the mistakes in the sample works cited page given as a handout.

Exercise: Correcting mistakes in in-text citations

Exercise: Correct the mistakes in the following in-text citations.

- According to Wong (2001: 16), he states that the Internet is a useful research tool.
  According to Wong (2001: 16), ~~he states that~~ the Internet is a useful research tool.
  ~~According to~~ Wong (2001:16) ~~he~~ states the Internet is a useful research tool.
- Wong (2001, p.16), he states that the Internet is a useful research tool.
  Wong (2001: 16)~~, he~~ states that the Internet is a useful research tool.
- Wong states that the Internet is a useful research tool (16).
  Wong (*2001*) states that the Internet is a useful research tool (16).
- Wong (2001: 16) says that the Internet is a useful research tool.
  Wong (2001: 16) ~~says~~ *states* that the Internet is a useful research tool.

Exercise from `http://libguides.tru.ca/ld.php?content_id=7335769`

Exercise: Correcting mistakes in in-text citations

Exercise: Correct the mistakes in the following in-text citations.

- Wong (2001: 16) state that the Internet is a useful research tool.
  Wong (2001: 16) state*s* that the Internet is a useful research tool.
- Wong, D. (2001: 16), states that the Internet is a useful research tool.
  Wong~~, D.~~ (2001: 16)~~,~~ states that the Internet is a useful research tool.
- 'The Internet is a useful research tool', Wong (2001: 16).
  'The Internet is a useful research tool', (Wong 2001: 16)
- Wong (2001: 16) claims that the Internet is a useful research tool.
  Wong (2001: 16) ~~claims~~ *states* that the Internet is a useful research tool.
- Wong (January 1, 2001: 16) claims that the Internet is a useful research tool.
  Wong (~~January 1,~~2001: 16) claims that the Internet is a useful research tool.

Exercise from `http://libguides.tru.ca/ld.php?content_id=7335769`

Plan

What is plagiarism?

Plagiarism is the act of **intentionally** or **unintentionally** using words, sentences, phrasing, ideas, concepts, images, figures, data, results and other intellectual resources **without attribution**, with the effect of making them seem as if they originated with you. (my definition)

What is plagiarism?

"Plagiarism is presenting someone else's work as if it were your own, whether you mean to or not. 'Someone else's work' means anything that is not your own idea, even if it is presented in your own style. It includes material from books, journals or any other printed source, the work of other students or staff, information from the Internet, software programs or other electronic material, designs and ideas. It also includes the organization or structuring of any such material." (Glossary, University of Wellington, New Zealand).

Penalties for plagiarism

Penalties for plagiarism can be severe. Examples:

- Revocation of degree (Annette Schavan, 2013; Karl-Theodor zu Guttenberg, 2011)
- Loss of job
- Expulsion from school
- Failure of class or assignment

Why do students plagiarize?

A few reasons:

- Ineffective academic work habits (e.g., don't know how to write a paper, didn't paraphrase a paragraph from an article when putting it into their notes and then using the paragraph)
- Ineffective time management (e.g., procrastination)
- Unrealistic personal expectations (e.g., perfectionism)
- Ignorance about which academic practices are unacceptable
- Moral failings (e.g., being intentionally dishonest)

The first four are fixable in your students!

Some ways of plagiarizing something (and related academic misconduct)

- Copying an entire paper and passing it off as your own work.
- Copying part of a paper and using it (a page, a paragraph, a phrase).
- Using an idea, concept, opinion of someone else's without attributing it to them.
- Using figures, tables, examples, formulas, etc. from someone else without giving them proper attribution.
- Using someone's wording without quoting it and attributing it to them.

Rule of thumb: any time something did not originate with you (the idea, the wording, the explanation, the formula) you must cite it.

- It's difficult to overcite something in your paper.
- If you are in doubt, it's usually best to cite.

Another form: citation plagiarism

Using citations from sources without giving them due consideration (e.g., reading the sources cited).

- Scenario: You are working on a paper on phonology, and you need sources for some of the factual claims you make. You go to the Wikipedia page for phonology, scroll down to the "works cited" section, and copy some of the citations directly into your bibliography.
- This is academic misconduct because, although the sources might be relevant, you didn't pursue the sources before putting them in your paper.
- Fundamentally dishonest to use sources that you didn't look at.

This variety of academic misconduct isn't often remarked on when discussion plagiarism, but it's important to talk about due to widespread perception that it's ok. (You can find endorsements of this on sites like Reddit, for instance.)

Exercise: Identifying plagiarism

(http://plagiarism.arts.cornell.edu/tutorial/exercises/questions.cfm)

- Source: The ways in which domesticated animals have diverged from their wild ancestors include the following. Many species changed in size: cows, pigs, and sheep became smaller under domestication, while guinea pigs became larger.
- Student writing sample: There are many differences between domesticated and wild animals.

Did the student cite correctly?
Yes. Not an idea unique to the source.

Exercise: Identifying plagiarism

(http://plagiarism.arts.cornell.edu/tutorial/exercises/questions.cfm)

- Source: The ways in which domesticated animals have diverged from their wild ancestors include the following. Many species changed in size: cows, pigs, and sheep became smaller under domestication, while guinea pigs became larger.
- Student writing sample: Domesticated animals diverged from their wild ancestors in numerous ways. Animals such as cows became smaller, while animals such as guinea pigs became larger.

Did the student cite correctly?

No. Used ideas from the source without attribution. Plagiarism.

Exercise: Identifying plagiarism

(http://plagiarism.arts.cornell.edu/tutorial/exercises/questions.cfm)

- Source: The ways in which domesticated animals have diverged from their wild ancestors include the following. Many species changed in size: cows, pigs, and sheep became smaller under domestication, while guinea pigs became larger.
- Student writing sample: A careful examination of the ways in which domesticated animals have diverged from their wild ancestors shows that cows, pigs, and sheep became smaller under domestication, while guinea pigs became larger.

Did the student cite correctly?

No. Quotes nearly word-for-word from the source. Plagiarism, as there are no quotation marks and citation to show the idea comes from the source.

Exercise: Identifying plagiarism

(http://plagiarism.arts.cornell.edu/tutorial/exercises/questions.cfm)

- Source: "In Gothic writings fantasy predominates over reality, the strange over the commonplace, and the supernatural over the natural, with one definite authorial intent: to scare. Not, that is, to reach down into the depths of the soul and purge it with pity and terror (as we say tragedy does), but to get to the body itself, its glands, epidermis, muscles, and circulatory system, quickly arousing and quickly allaying the physical reactions to fear." (*Moers, Ellen. "Female Gothic: The Monster's Mother." Frankenstein. Ed. J. Paul Hunter. New York and London: W. W. Norton, 1996. 214.*)
- Student writing sample: According to Ellen Moers, Gothic writings "get to the body itself, its glands, epidermis, muscles, and circulatory system, quickly arousing and quickly allaying the physical reactions to fear" (214).

Did the student cite correctly?

Yes. Used quotes to show the words were the author's, plus a citation.

Exercise: Identifying plagiarism

(http://plagiarism.arts.cornell.edu/tutorial/exercises/questions.cfm)

- Source: "In Gothic writings fantasy predominates over reality, the strange over the commonplace, and the supernatural over the natural, with one definite authorial intent: to scare. Not, that is, to reach down into the depths of the soul and purge it with pity and terror (as we say tragedy does), but to get to the body itself, its glands, epidermis, muscles, and circulatory system, quickly arousing and quickly allaying the physical reactions to fear." (*Moers, Ellen. "Female Gothic: The Monster's Mother." Frankenstein. Ed. J. Paul Hunter. New York and London: W. W. Norton, 1996. 214.*)
- Student writing sample: While tragedy affects the soul, Gothic writings affect the body.

Did the student cite correctly?

No. It's a paraphrase or summarization of the author's opinion, but without citation.

Exercise: Identifying plagiarism

(http://plagiarism.arts.cornell.edu/tutorial/exercises/questions.cfm)

- Source: "In Gothic writings fantasy predominates over reality, the strange over the commonplace, and the supernatural over the natural, with one definite authorial intent: to scare. Not, that is, to reach down into the depths of the soul and purge it with pity and terror (as we say tragedy does), but to get to the body itself, its glands, epidermis, muscles, and circulatory system, quickly arousing and quickly allaying the physical reactions to fear." (*Moers, Ellen. "Female Gothic: The Monster's Mother." Frankenstein. Ed. J. Paul Hunter. New York and London: W. W. Norton, 1996. 214.*)
- Student writing sample: Gothic novels such as Frankenstein were written with one definite authorial intent: to scare (Moers 214).

Did the student cite correctly?
No. The quotation is direct, but not marked as direct quotation. Has the appearance of a paraphrase.

Exercise: Identifying plagiarism

(http://plagiarism.arts.cornell.edu/tutorial/exercises/questions.cfm)

- Source: "I greedily devoured the remnants of the shepherd's breakfast, which consisted of bread, cheese, milk, and wine; the latter, however, I did not like." (*Shelley, Mary. Frankenstein. Ed. J. Paul Hunter. New York and London: W. W. Norton & Co., 1996. 70.*)
- Student writing sample: In his tale, Frankenstein's monster recounts how he greedily devoured the remnants of the shepherd's breakfast, thus showing his extreme hunger.

Did the student cite correctly?

No. Uses a direct quotation, even though it also has a student claim. Needs to quote the author.

Exercise: Identifying plagiarism

(http://plagiarism.arts.cornell.edu/tutorial/exercises/questions.cfm)

- Source:

Marcello Venusti, 'Portrait of Michelangelo', 1535. Florence, Casa Buonarroti.

MICHELANGELO
1475 - 1564
Italian, Florentine
A painter, on panel and in fresco, a sculptor, architect and poet, Michelangelo Buonarroti was the first artist recognized by contemporaries as a genius.

(*UK National Gallery*)

- Student writing sample: Michelangelo was a Florentine artist.

Did the student cite correctly?
Yes. Common knowledge.

Exercise: Identifying plagiarism

(http://plagiarism.arts.cornell.edu/tutorial/exercises/questions.cfm)

- Source:

Marcello Venusti, 'Portrait of Michelangelo', 1535. Florence, Casa Buonarroti.

MICHELANGELO
1475 - 1564
Italian, Florentine
A painter, on panel and in fresco, a sculptor, architect and poet, Michelangelo Buonarroti was the first artist recognized by contemporaries as a genius.

- Student writing sample:

Figure 1

Evidence from contemporary portraits of Michelangelo suggest that he dressed simply and possessed a frank, open gaze (Figure 1).

Did the student cite correctly? **No.** Didn't cite figure.

Can you plagiarize from yourself?

Yes.

Plagiarism is borrowing without attribution. If you don't cite yourself, you have plagiarized the work. (The university also still considers this academic misconduct as well.)

What to do if you suspect a student of plagiarism

- If you suspect a student of plagiarism or related academic misconduct, you will need evidence.
- It will help to find the source they likely plagiarized from.
  - To find the original source, try typing suspected phrases from the student paper into a search engine.
  - First try with quotes (for an exact match)
  - Then try without quotes (for cases where some words may have been changed)
- Or, evidence from a plagiarism checker like TurnItIn.
- You might also catch them by asking them questions about what they wrote, or asking them to explain it; cheaters won't be particularly familiar with the sections of the paper that they didn't write themselves.
- Build up documentation regarding their cheating, and approach your supervisor, since you don't have standing to investigate further.
- Your supervisor will consider the evidence and whether to pursue the case.

Plan

What is the role of presentations?

The role of presentations:

- Discuss a specific aspect of a text (or texts) clearly and in detail. (Classwork)
- Discuss specific, important aspects of research results clearly and in detail.(Research)

Two types you find often in linguistics:

- Slide presentations (e.g., Powerpoint)
- Handout presentations

What to use?

For slide presentations (not exhaustive):

- Microsoft Powerpoint is the standard, of course.
  - HHU provides access to its students and staff
- Apple Keynote is also an alternative if you have a Mac, but in my opinion it doesn't do anything better than Powerpoint.
- LaTeX + beamer (if you are already a LaTeX user)

For handouts:

- Your favorite word processor
- LaTeX

When to use handouts, when to use slides

- Until recently, there was a cut between slides and handouts.
  - Handouts were used for anything in formal linguistics: semantics, syntax, and phonology.
  - Slides were used for anything experimental.
- The situation has changed now: slides predominate with both experimental and formal work.
- Handouts:
  - Good if you have lots of data that requires some thought (subtle judgements, foreign language data)
  - Good if you have formulas and trees that people might want to refer back to during the talk, or spend some time understanding.
  - Allows you to have more detail than slides. Can also be wordier.
- Slides:
  - Good if you have charts and graphs, or a fairly visual presentation.
  - Can control the attention of the audience better.

What goes in to a presentation?

- Before thinking about what to put in a presentation, think about how much time you have to present your topic (15-30 minutes is typical for presentations in a course).
  - Long presentations will let you go in to more detail, or cover a broader range of material.
  - However, with a short presentation, you will need to concentrate on just a few points.
- You might have an urge to speaker faster to cover more in a short presentation, but this will likely backfire. If you speak too fast, it is much harder to process what is being said and you will lose your audience.

What goes in to a presentation?

- When prepping what to put in the presentation, you don't need to follow the structure of the paper you are presenting.
  - Papers are structured in a certain way in order to build an extended argument.
  - As you have less time in a presentation, you must choose only those parts of the argument that are absolutely crucial.
  - Since you're not using the entire argument, it might be useful to rearrange the order of presentation.
- You should target the level of your presentation to the level of audience.
  - What you can safely assume in an introductory course, for instance, will be different than in an advanced seminar.
  - Having a sense of what you don't have to explain to an audience will let you omit or drastically reduce the amount of that material that's in your presentation, and let you spend more time on important and interesting topics.
- The level of technicality of the presentation should be geared towards the audience as well.

Building the content

- Present on the aspects of the work that deal with the theme of the course.
- Think about topics and points of interest that have emerged repeatedly in the course.
- You should focus on those kinds of things if they are in the paper you are presenting.
- Other potential focus: compare and contrast two papers.
  - If you are given two papers to present, talk about what is similar in both papers, but where the differences lie.
  - You can do this if you only have one paper you are presenting as well, by comparing to a similar work previously discussed in class.
- Generally, for a class presentation, you are summarizing work, so be concise so as to fit in your time period. But, don't omit so much detail that the presentation can no longer be understood. Explaining too little is just as much a sin as explaining too much.

Building the content

- At some point, it's likely you will have to talk about research as well.
- Many of the same points: know your audience and know how long you have to speak.
- Tell a story with your talk. A good talk has a beginning (laying out the problem), a middle (with evidence and a clear proposal), and an end (conclusion restating what you did, maybe with some discussion).
  - Only explain as much as is necessary for the talk.
  - Extra detail is in your paper.
- Give a clear statement of what you will do, and a roadmap. (No mystery novels!)
- Make it clear which results are yours.
- Try to include examples if possible.
- Never say anything negative about your work!
  - There are plenty of people in an audience who will be prepared to say negative things about your work. Don't invite them to do so.
  - "Blood in the water" effect. Once you are "bleeding" the sharks in the audience will smell this and start feeding.

Building the content

Describing experiments.

- When talking about an experiment, give an explanation of how the experiment worked, preferably with figures showing how it worked.
- Even better: do one trial of the experiment.
- Only the most crucial results from the experiment should be reported.
- Learn the lingo for talking about experimental work, and use it if your audience also knows it. You can more quickly talk about the experiments. (e.g., Latin square design, between-subjects, two way ANOVA)
- Generally, don't go into too much detail about the stats.
- Don't rush through your graphs. Give an explanation of what the graph is showing and time for the audience to digest it.

Building the content

- Describing formal linguistics.
  - Explain any definitions that are relatively unknown or you built.
  - Give some brief descriptions of what is going on in your formalizations (describe the formula, the tree, the frame, etc.)
  - Generally, you want to give some detail, but don't spend all your time with explanations.
  - Again, learn the lingo from the field in order to make descriptions easier (e.g., relation between X and Y, head movement, word-initial)
- My impression is that its ok to use example numbers within your presentation as well, as if it were a paper.

The form of the presentation

- Use a simple theme, with a white or light grey background.
- Have numbers on your slides.
- Don't put too much text on a slide.[5]
- Don't make the text too small.
- Make your graphs large. One graph per slide.
- Don't use fancy transitions between slides. They're annoying to the audience and can take excruciatingly long.
- Plain backgrounds!
- But, don't be afraid to have some simple transitions within a frame to hide and show bits of the slide incrementally.
- Use color and **font weight** to call attention to certain information, but don't do it too much.

[5] I failed to follow this rule in putting together the slides for this course, unfortunately.

On handouts

- Many of the same tips apply to handouts: tell a story and be careful with the amount of detail.
- Common handout style: landscape orientation, two column.
- Generally, handouts should be mainly examples (linguistic examples, formulas, trees, rules, definitions, etc.) with bullet points between the examples providing the discussion. No large blocks of text.
- Handouts do allow you to go into some additional detail than slides, since you can have additional detail printed, but not talk about it.
- However, in general, you want to talk about everything you put on a handout.

Other tips

- Practice! Know where the stumbling blocks in presentation are, so you can talk yourself through them easier. If the talk is timed (like at a conference or even some vivas) have a friend time you.
- Don't read directly from the slide or handout for long periods of time.
  - I prefer to glance at a slide and paraphrase, but sometimes read directly from the slide if I can't remember what I needed to say.
  - If you get nervous during presentations, you can have notes to refer to (either on paper or in the presenter view in Powerpoint).
  - Some people like short notes to remind themselves how to phrase things.
  - Others even like a full script prepared, just in case the words "dry up" and they can't think of what to say.
- An appendix in your slides/handout can be used to include things you don't have time to talk about, but might want to refer to in the question period.
- Some people prefer to have prepared notes of what exactly they will say. I prefer styles where speakers can speak easily about the slides.

Other tips

- If you are using a handout, take time to mention example numbers as you are talking. ("As we see in example (3), ...")
- Don't try to say the examples from a foreign language you don't speak. Refer instead to the gloss (it's why it's there).
- Learn to stand off to the side while giving a presentation, not in front of the screen.
- Don't talk too fast. Talk clearly. Talk loudly enough to be heard.
- Make eye contact with the audience. Don't talk to only one person in the audience, or worse, your shoes.
- Never talk about things that aren't clear to you. It will show to the audience. (Keep this in mind when preparing the content of the presentation as well.)

Getting things out of talks: the Three Things exercise

- Method of actively engaging with the content of a talk.[6]
- Theory: If you get three (small) things from a talk, it was a success. If you didn't, the talk was not a success.
- How it works:
  - On a sheet of paper or note card, have three things (and only three things) written down at the end of the talk.
  - These can be anything: definitions, interesting problems, examples, questions you want to ask the speaker, questions you want to ask your advisor... anything.
  - As you listen to the talk, write interesting things down on your paper or note card.
  - Once you have three things and want to add something else, **you must cross out one of your three things to make room for the new thing.**
- Crossing out makes you process the information more, making you more likely to retain it.

[6] From `http://math.stanford.edu/~vakil/threethings.html`

Plan

Structuring a lecture

- Helpful to think about what the main topic of each class is. What is the single main point that you want/need to communicate that day?
- Everything you do in that class should be in service of that point.
- I find it helpful to think of teaching as being like research: start with a claim, and provide evidence and an argument for that claim.
- Tend to set up my classes around linguistic puzzles:
  - Example (intro): syllable structure as a question about why loan words undergo vowel epenthesis in Japanese
  - Example (seminar): nominal gradability as a question about why particular modifiers have the distribution they do
- Use examples as a way of addressing the day's topic
- Try to analyze particular examples as a class in order to see what the theoretical consequences are. Think about *why* questions to ask students, in order to move lecture forward (example: get students to interpret a graph).
- Essentially, it's a way of building an argument and redeveloping the steps the field took to arrive at an answer to a theoretical question.

- Have notes for yourself printed off.
- I tend to teach with just notes and a blackboard, but many tutors use slides developed from the previous week's lecture by the professor.
- Make sure you have tested your examples so no unexpected discussion arises about them.
- Make sure you have enough examples in your notes. It's difficult to come up with new examples on the spot.
- Since a lot of linguistics is doing analysis, practice problems are useful to have. Pull from a textbook (don't use the same problems as the assignments/exams!) or from online sources.
- I try to reuse the same practice problems each time an I teach an intro course so that (i) I know the problem very well and (ii) don't accidentally use it on homework or an exam
- If you use practice problems in your teaching, rehearse them before class.

Your first day

- The first day of a class (and even the few couple days) is the most important, as it sets the tone for the entire rest of the semester.
- First day goals:
  - Introduce students to the topic in the course.
  - Give students an idea of how the course will run (lecture-based? lots of group work?)
  - Get students participating in the class.
- If you don't get students to talk in the first day or two of class, you will have a lot of trouble getting to them talk later on. Talkative, interactive students are more fun.
- Include exercises your first day that force the students to say things.
- Don't make the first day syllabus day; have a real lecture prepared.

Getting students talking

- Asking open-ended questions.
  - Ask questions periodically to force students to think about the lecture.
  - Questions that require some elaboration are better than yes/no questions.
- Solicit lists.
  - Ask the entire group of students to give as many answers to a question as they can think of.
  - Write the answers on the board as they come in.
- Group work.
  - Give small exercises in class that can be done in groups of two or three.
  - Have the students report back to the entire class on what they did in their group.
- Students can be notoriously quiet sometimes.
- One tip: wait them out. If there is awkward silence, students will be eager to fill that silence with an answer.
- But, if you are trying to wait them out and they won't give in, sometimes the problem is that your question wasn't comprehended very well. Rephrase it, and ask again.

Group Exercises

Why do group exercises?

- Encourage students to work collaboratively
- Give students a stake in the class
- Group participation rather than lecture
- Take focus of class away from the instructor and the lecture (partially)
- Students learn more when they are engaged
- Create atmosphere where everyone is free to participate
- Establish discussion as responsibility of both students and instructors
- Side effects: reduce your own teaching prep and make it more fun for yourself

A few ideas for group work

- **Peer review**: One student reads the work of the other, and provides commentary on it (e.g., no statement of the problem in the paper, hard to understand, references formatted wrong). Good for writing exercises.
- **Class debate**: Divide the class up into sides (you can do this with small groups or the entire class). Give them a position on a topic, and have them argue for that position. Summarize at the end.
- **Think-Pair-Share**: Ask a question to the class, and let the students take a minute to think of a response. Then, have the students pair up and discuss their responses. Afterward, have the pairs report to the class on their discussion.

A few ideas for group work

- **Paired Annotations**: Instructors or students identify articles significant to the course in some way. Each student writes a commentary on an article, and then is paired with another student who wrote on the same article. Students read and discuss each other's comments.
- **Roundtable**: Small groups sit in a circle and respond to a question, writing their responses down. Report to the entire class afterward.
- **Reciprocal Peer Questioning**: Assign reading, and then have students generate a list of two or three thought-provoking questions. In groups, students ask their questions to each other and answer them.

Teaching methods

- The HHU Hochschuldidaktik has a teaching methods book available as a PDF that is worth taking an additional look at if you think you will be using lots of group activities.
- `http://www.uni-duesseldorf.de/home/fileadmin/redaktion/Lehre/Hochschuldidaktik/Downloads/Methodenbuch_Stand151216.pdf`
- Hochschuldidaktik website: `http://www.uni-duesseldorf.de/home/studium-und-lehre-an-der-hhu/lehre/hochschuldidaktik.html`

Other strategies while in class

- Students talking
  - Don't try to talk over students.
  - Stop talking and wait for the students to notice that the lecture has paused because of them. Other students will often also try to get the other students to stop talking.
  - You can also ask the students who are talking if they have questions they want to ask you.
    - This strategy is especially good if it's genuine discussion between students.
    - If it's regular conversation between students, this can sometimes be a little embarrassing to the students, though, and make them a little grumpy towards you.
    - Weigh how much you might want to embarrass them before using this method.

Other strategies while in class

- Chalkboards
  - Write big
  - Write using your arm, not your hand
  - If the chalk squeaks, break it in half and use the broken tip to write with
- Never end the class early! There's always more you can do, so do another exercise or start the next lecture.
- Don't be afraid to admit you don't know the answer.
  - Don't try to make-up an answer you don't know.
  - Be ok with admitting when you aren't completely sure of something.
  - Students appreciate honesty in their instructors. (But try to find the answer for the next class.)
- Handouts: one strategy you can use if people get lost is to have "interactive handouts", handouts with blank spaces for notes, in order to guide students to what is important in the lecture.

10 Tips for First Time Teaching Assistants

Some other tips:[7]

- Accept that there will be some bad days
- You don't have to know all the answers
- Group work is great
- Ask them to expand on what they say
- Do not try to wing it
- Give them time to answer questions
- Learn your students' names
- Prepare more material than you think you need
- Check the room out before your class starts
- Ask for Help

[7] https://academicpositions.com/career-advice/10-tips-for-first-time-teaching-assistants

Cheating and plagiarism

What do you do if you encounter academic misconduct?

- As we discussed previously, you must gather proof before making an accusation.
- Examine the circumstances for cheating, try to find the original sources.
- You should talk with your supervisor if you suspect someone of plagiarism.
- If you suspect someone might take the opportunity to cheat during an in-class graded exercise like an exam, there are some options.
  - You can ask that the potential cheater move to a different seat.
  - You can ask that the person they are cheating from move to a different seat as well.
  - You can sit nearby in order to act as a deterrent.
  - And if you notice someone might be trying to look at someone else's work during an exam, sometimes all it takes is a cough or clearing your throat and a firm stare to let the person know you're watching them.