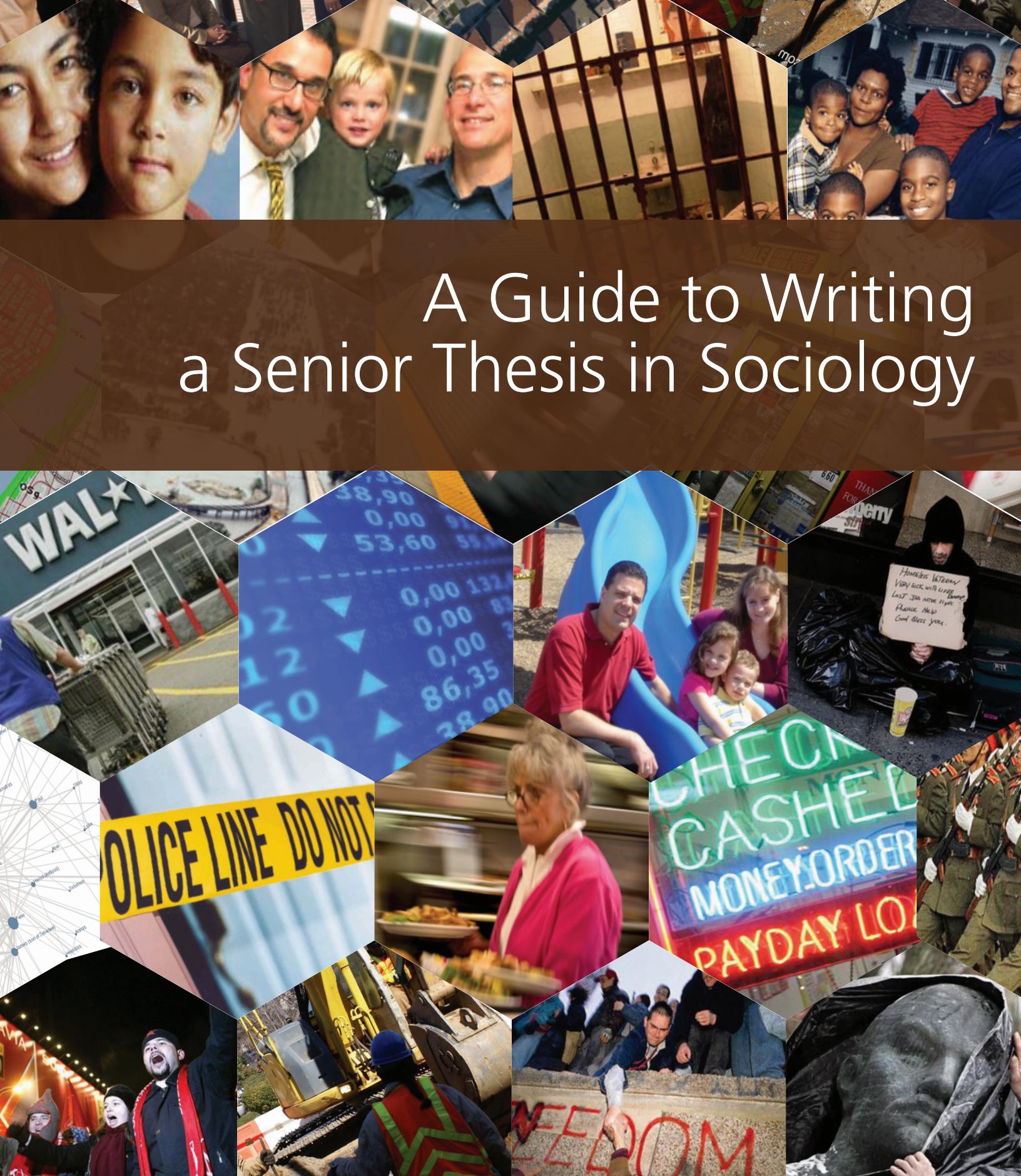


A Guide to Writing a Senior Thesis in Sociology



Department of Sociology
Faculty of Arts and Sciences
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HARVARD
COLLEGE

A Guide to Writing a Senior Thesis in Sociology

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Time Management and Sample Timeline

One of the most difficult parts of conducting original research is scheduling your time. Too many people leave the writing to the last minute, leave no time for revisions, and consequently produce a thesis that falls well below its—and their—potential. Others leave their advisers in the dark until shortly before the thesis is due and then get stuck when the adviser asks for changes and time runs out. Here are some tips for time management:

- **Plan ahead:** Work backwards from the thesis due date and block out time for each step in the process. In general, you will need **a month or so** for revisions, polishing, and final typing, and your adviser will need ample time to look over a completed draft before you revise it. Therefore, you ought to have a complete draft to your adviser **five or six weeks prior to the deadline, which means early February.** This means that you ought to be writing by early January, which means that the research ought to be more or less complete by early January.
- **Start writing early:** Work on the introduction and literature review drafts before collecting data, and write the methods chapter as you design your instruments. The final version will likely look very different as you continue to revise and focus the thesis, but working on drafts is easier than staring at a blank screen!
- **Meet regularly with your adviser:** Consult with your adviser on a schedule and keep him/her regularly informed of how things are going. Do not leave consultations to the last few weeks: as your thinking changes, as your work progresses, as your findings begin to become clear, keep your adviser up to date on what is happening. Communicate!
- **Allow time for your adviser to read your work:** Remember, advising is a two-way street; it requires an effort on the part of both of you if it is to be maximally beneficial to the thesis. You are probably immensely busy; so is your adviser! Keep that in mind.
- **Make some progress every week:** A completed thesis looks immense. By breaking it into shorter writing projects, it becomes less imposing, more like the shorter papers that you're used to writing.

Schedule for Junior Spring and Senior Year

Choose to Write a Thesis!	Spring of your junior year
Develop Research Question	Spring of your junior year
*Statement of Intent and Adviser Selected	Last day of spring reading period, junior year
Read and Research for Lit Review	June and July
Design Instruments	June and July
Test Instruments	August
Data Collection	September-December
*Prospectus and Completed Approval Form	Friday before 5th Monday (Add/Drop Deadline) fall term, senior year
Write Intro and Literature Review	October-November
Initial Data Analysis	December-early January
*Progress Report	Last Friday of fall reading period, senior year
<i>Final Exam Period</i>	<i>Mid-December</i>
Write Methods Chapter	December-January
Write Results Chapters	January
Revise Intro and Literature Review	January-February
Write Discussion and Conclusion	Early February
Revise Results Chapters	Early February
Complete Draft to Adviser	Mid February
Incorporate Adviser Feedback	Late February
Final Draft to Adviser	Last week of February
Incorporate Adviser Feedback and proofread	Early March (week before due date)
*Thesis Due Date	Tuesday before spring recess, senior year

*For these major deadlines, view "Schedule of Thesis Deadlines" on the department website: http://www.wjh.harvard.edu/soc/pages/senior_thesis.html.

This sample timeline assumes that the adviser can turn around a draft in two to three weeks, which may or may not be the case for your adviser. It also assumes the student will do some work on the thesis over the summer. Although this is not required, we find the strongest theses do begin in the summer.

Departmental deadlines are in bold.

Keep in mind that you will be taking courses during this time and plan accordingly!

Before You Begin. . .

Choosing to Write a Thesis

What is a Sociology Senior Thesis?

A senior thesis is an original research project undertaken during one's senior year at Harvard College. The thesis project requires research into the theories and past research relevant to the project, analysis of data, either original or existing, and a written final product. The thesis should be a project that can be feasibly completed in 7-10 months. Generally, a thesis is about 60 to 100 pages, but there is no minimum or maximum.

Senior Sociology concentrators are not required to write a thesis. A thesis is required for those students who wish to graduate with honors in Sociology.

Why Should I Write A Senior Thesis?

The decision to write a thesis should be taken seriously. You should consider what benefits you personally will get from the process. About half of Sociology concentrators choose to write a thesis; writing a thesis is not the best plan for everyone.

Good Reasons to Write a Thesis

- **Intellectual excitement about an idea and the desire for an intense academic experience that caps off your academic program.** The thesis is a "capstone" experience that allows you a great deal of freedom to explore a topic you care about and to build an area of expertise and wisdom. You can spend a whole academic year answering a question you think is important and intriguing. You have the opportunity to make an original contribution to knowledge. Many students report that writing a thesis is the most intrinsically satisfying part of their college experience.
- **Close contact with a faculty member.** You and your thesis adviser will meet often (ideally weekly or semi-weekly) for an entire academic year. You and your adviser will get to know each other well and will develop a strong mutual interest in the outcome of your thesis. The undivided attention of your adviser and your working relationship with him or her can be one of your best learning experiences.
- **Career preparation.** If you are considering graduate school in sociology or the social sciences, humanities, or even the sciences, we encourage you to write a thesis. The experience of writing a thesis is the closest you can come as an undergraduate to understanding what advanced graduate study will look like. Writing a thesis provides you with the opportunity to test and hone your skills as an independent researcher—and to make sure that you like the process of independent research! It is a good way to gain some self knowledge. If you do not like key aspects of writing your thesis (independent research, the writing process, intellectual debate and stimulation) you will likely not enjoy writing a dissertation. Alternatively, many people who had not considered graduate school found the thesis writing process so appealing they changed their future plans.

Thesis writing is great preparation for non-graduate schools careers as well—gathering information, analyzing it, and writing to persuade a reader are tasks that every professional will value.

Bad Reasons to Write a Thesis

- **Graduating with honors.** If the only reason you want to write a thesis is to graduate with honors, it is unlikely you will have a positive experience. The thesis requires deep and persistent engagement with a topic, and unless you have a genuine interest in that topic, the process will not be intrinsically rewarding (and will probably be quite painful!).
- **Because you think you should or someone else (parents, block mates, friends, etc) thinks that you should.** Do not worry about writing a thesis because it seems like everyone else is doing it. The real question is whether you have a topic or question you care about and the commitment and desire to really devote yourself to the thesis. Impressing others or living up to some idea of what your senior year should be is a shallow reason to write a thesis, and you will probably regret it.

If undertaken for the right reasons, writing a thesis can be an immensely rewarding experience. Be sure that you have a genuine interest in answering a question that is important to you before you begin.

If undertaken for the right reasons, writing a thesis can be an immensely rewarding experience. Be sure that you have a genuine interest in answering a question that is important to you before you begin.

Writing a thesis is not right for everyone. Some students do not have the time to commit to the process due to team or activity commitments, coursework requirements, or because they anticipate having to spend time sitting for job interviews in the fall and spring. However, many students are still interested in doing independent research and working closely with a faculty member. For these students, we encourage taking Sociology 91r, an independent reading and research course, with a Sociology faculty member. This is a one semester course resulting in a smaller research paper, but it gives you the experience of independent work and provides an alternative way to tie together what you have learned as a Sociology concentrator.

The First Steps: Choosing a Topic and an Adviser

Once you've decided to take the plunge and write a senior thesis, there are two key choices you must make: choosing a topic and choosing an adviser.

Choosing a Topic

Hopefully, you have already thought about a research topic that interests you before deciding to write a senior thesis. A research topic can be very broad—you have not yet developed a specific research question, but instead have an expansive area of interest. Here are some tips for choosing a successful thesis topic:

- **Let your interests guide you.** This project will consume much of your senior year, so pick a topic that you are genuinely interested in and committed to exploring. Think about interesting topics or readings from your coursework—what caught your attention?
- **Pay attention to your social world.** Look to the media, news outlets, your friends, Cambridge, and Boston—what issues are people debating now? What questions need answering?
- **Think of your volunteer/civic engagements in a new way.** Many Harvard students are active in causes that matter to them. Is there a sociological question inspired by the volunteer work you

are doing? Maybe you volunteer in an education program for underprivileged children and you hear conversations about school readiness at home. This experience could turn into a senior thesis about differences in how parents from different racial/ethnic backgrounds prepare their children for kindergarten. Combining your personal and academic interests ensures you will stay engaged with your topic.

- **Revisit classical theoretical issues.** Think back to the founding theorists you read about in Sociology 97. Do Marx, Weber, Durkheim, Simmel, etc. put forth a proposition that you'd like to test with empirical data?
- **Think of this as a chance to do something totally new.** Is there a course you wish the department offered about a certain topic? What research questions follow from that topic?
- **Engage with current or past research**—see what has been done. The *American Journal of Sociology* and *American Sociological Review* are the top journals in the discipline. What topics have they covered recently? What can you add to the debate? The American Sociological Association also publishes a journal called *Contexts* with shorter magazine-style articles about "hot topics."

Again, your research topic does not have to be specific yet. In the next section, we discuss moving from topic to research question. Do some brainstorming—write down 5 to 10 topics that interest you. Talk with friends, professors, and teaching fellows to see which topics are the most interesting (and could provide the starting point for a strong thesis). Once you have decided on a topic, you are ready for the next step.

Thesis Tip: Keeping a Project Journal

In the “hard” sciences, lab researchers and technicians keep laboratory notebooks, where they write down progress for each day. Similarly, you should keep a thesis journal—sociology is a science!

Devote a notebook or an electronic file to your thesis. Every time you work on your thesis, note the date and the problem you are pursuing that day. Start at the very beginning of the process with brainstorming topics and keep writing in the journal up until the end. You should record *what you are doing* and *why* at each stage of the process. This record will prove helpful when you are working on data collection and analysis if you forget why you made a decision, or if you don't work on your thesis for a week or so during midterms and can't remember what you were working on last.

Keep good notes at each stage of the thesis writing process and you will find that writing the actual thesis becomes much easier—you've already started!

Choosing an Adviser

Once you've identified the broad subject area you are interested in exploring, you should think about who to choose as an adviser.

You should talk with your adviser to be clear about what you expect from them and what they understand their responsibilities to be.

All senior thesis writers will be supervised by an adviser. S/he will work closely with you throughout the thesis process. Generally, the adviser is the “final word” on your thesis in terms of approving your topic, methods, and the final product and is involved in reading drafts and meeting with you frequently. You should talk with your adviser to be clear about what you expect from them and what they understand their responsibilities to be.

Faculty members in the Department of Sociology may serve as an adviser. Advanced graduate students in the PhD programs in Sociology, Social Policy, and Organizational Behavior, as well as faculty in other departments, professional schools, or research institutes at Harvard, may also serve as a thesis adviser subject to the approval of the Director of Undergraduate Studies (DUS) or the Assistant Director of Undergraduate Studies (ADUS). A list of advanced graduate students eligible to serve as senior thesis advisers is available on the department website and/or can be obtained from the Undergraduate Office.

There are several ways to go about choosing an adviser. One strategy is to consider professors in whose courses you have been or are enrolled. Is your thesis topic relevant to their research interests? A second strategy is to look on the Sociology department website (www.wjh.harvard.edu/soc) for a listing of faculty members and their research interests and ongoing projects. You can also think about interesting articles or books you’ve read in your coursework—our department boasts many of the most prominent scholars in the field, and it’s possible that one of the authors that inspired your topic is here! Finally, you can meet with the ADUS to brainstorm about who a suitable adviser might be. They may point you to new or visiting faculty of whom you are otherwise unaware.

You should consider several criteria when choosing an adviser. First, your adviser should be interested in your topic. This does not mean that they must be an expert on your topic; the adviser’s guidance in terms of sociological thinking and research is often more important than their substantive guidance. Ideally you will become the expert on your topic as you go through the thesis writing process. But the adviser should at least find your topic interesting enough to ensure their continued involvement. You should also think about faculty members’ methodological expertise. It may be more helpful that you have someone who does work similar to the kind you are interested in (ethnography, interviews, advanced statistical techniques, etc.) than to have someone who can serve as a substantive expert. Second, you should also consider personal styles. You will be working with this person over the course of a year, and it’s important that you feel comfortable with them. Often a faculty member will advise a thesis outside their area of specialization, so if you have a good working relationship with a faculty member, this can be more important than expertise. There are experts in nearly every field across our University, and sometimes meeting once or twice with an “expert” is all the substantive input you need. It is as important to find an adviser who is supportive and with whom you feel comfortable as to find an adviser who works in your area of interest.

You can also learn more about potential graduate student advisers by visiting the Sociology department website for a listing of graduate students and their research interests. You should also think about teaching fellows you have had in past courses. Do you know about their interests? Do you get along well with them? Emailing a former TF is often a good starting point to learn more about graduate student interests. If they can’t personally

work with you, they often know a lot about what fellow graduate students are interested in and who might be a good fit for your topic.

Once you have identified a potential adviser, you must ask him or her to advise the thesis! This should take place during spring semester of your junior year. You will move back and forth between choosing an adviser and finalizing your research question (see next section). Before approaching advisers, do some brainstorming on your own. For your own use, write a brief description of your potential topics and 2-3 more specific research questions. When you meet with a potential adviser, you do not yet need to have a definitive research question, and this is something the adviser can help with. After doing some brainstorming, casually bounce your ideas off of current professors, TFs, classmates, and friends. This will help you get comfortable articulating thesis topics. However, you should not be intimidated to go speak with a professor! You can make clear to them that you are still developing your ideas and would appreciate their guidance; no adviser will expect you to have a finalized research question at the first meeting.

You should set up appointments to discuss the thesis with potential advisers. Send them an email requesting a meeting to discuss the possibility that they advise your thesis. Include the description of your topic. Keep in mind that professors are quite busy. It may be a few days or more before you hear back. When you have scheduled a meeting, present your potential topic and ask them if they would be interested in advising it. If you are still working on developing your specific research question, ask for their advice or feedback on your potential research questions.

Questions to Ask During Your First Meeting with a Potential Adviser

1. How promising do they find your research topic? Are there particular directions they think you should explore in developing a research question?
2. How often do they like to meet with advisees?
3. How many drafts are they willing to read? How many days do they require to read a draft?
4. Do they prefer to receive written work or an agenda from you prior to meetings?
5. How available are they during your senior year? Are they on sabbatical or away from Cambridge? Do they have a heavy teaching load?
6. Do they have any books or journal articles they think you must read before your next meeting?
7. Can they think of any experts around the University who might be good resources for you?
8. Should you schedule appointments with them directly or with their faculty assistant?

In addition to advising and grading, your adviser will give you a grade for the full-year course Sociology 99 that you register for during your senior year. This course is graded SAT / UNSAT.

Sample Email: Recruiting an Adviser

Taking the first steps and emailing a faculty member can cause some students anxiety. Here is a sample email in case you are worried about making the first connection.

Dear Professor X,

My name is Chris Student, and I am a sociology concentrator planning to write a senior thesis next year. I am still developing my thesis topic, but I plan to investigate how first generation immigrant teenagers develop ideas about future career paths.

I was wondering if you would be able to meet with me to discuss my thesis project and the possibility of serving as my adviser. Please let me know what dates might work for you. I look forward to meeting with you!

Thank you,

Chris Student

A research question is a specific problem or puzzle that can be addressed with evidence in the typical length of a senior thesis.

A research question is anchored in a discipline, it deals with a narrow topic, and it is testable with empirical data.

Turning a Topic into a Research Question

What is the difference between a research topic and a research question? A topic is a broad subject area while a research question is much narrower. A research question is a specific problem or puzzle that can be addressed with evidence in the typical length of a senior thesis. A research question is anchored in a discipline, it deals with a narrow topic, and it is testable with empirical data.

What do we mean by “anchored in a discipline”? The social sciences deal with many of the same issues—economists, political scientists, and sociologists have all written about cities, crime, education, the arts, immigration, wars, the media, the family, etc. Developing a sociological research question requires situating your topic within the sociological debates and literature. How do you know if your question is sociological? Nearly every topic can be answered in a sociological way; sociology is a discipline concerned with explaining how groups of people interact, and so we focus on things like stratification and inequality, culture, and organizations to name a few. Sociologists think about how individuals fit into larger shared systems of thought, resource distribution, and power, among other things. For example, we think about how people share beliefs, values, and accepted behaviors and how this can explain differences between groups. If one racial/ethnic, gender, age, or nation-based group has a different system of thought than another, can it explain why one group is more successful than another? We also think about resource distribution. Why do some groups in society have so much more than others, how did it get to be this way, and what are the consequences? Rather than thinking about the inequality among individuals, we examine whether shared characteristics of race, class, gender, education, etc., can explain these differences. We also think about power. How do positions of power in organizations, governments,

and social groups come to be? Why do some positions hold more power than others? How do we assess which individuals should fill these roles? How is power perpetuated by systems and/or individuals?

How narrow should the research question be? The end product of your thesis is 60-100 pages, with 1-3 chapters (20-50 pages) describing your findings. You will be working on the paper for 7-10 months. Your topic should be a specific question that lends itself to 1-3 sub-questions to discuss in your findings chapters, and it should also be broad enough to sustain a nearly year-long project. (Typically students have more trouble developing a narrow-enough topic rather than a broad-enough topic!)

Your question must be testable with empirical data. If you are going to write a theoretical thesis (which is rarely undertaken by concentrators), you may not be actually testing the question, but it has to be something that could be tested by others, given the right data source.

With this in mind, how should you move from topic to research question?

- Brainstorm several narrower “slices” of your topic. Are you interested in a particular group of people within a topic? What particular aspect of the topic are you considering? Are you more interested in how people interpret or feel about something? Or are you more interested in people’s outcomes?
- During the brainstorming process, talk with your adviser, faculty members, graduate students, classmates, and friends. Don’t be afraid to say to your adviser, “I’m really interested in the prison system and I would like to write a thesis on this. How can I begin?” They may have a research question they think needs to be answered or can point you to relevant literature. Do not be afraid to talk to a number of different faculty members about the same topic or idea or about several topics or ideas. Often their comments and questions will help you refine the topic further; sometimes we don’t realize things aren’t clear until we try to explain it to someone else!
- During this time, you should also start to read broadly on your topic. You are not undertaking a literature review quite yet, but often reading through what has been done will lead you to questions that have not been satisfactorily answered, debates that continue to occur, an implication or follow-up to an argument that has not been explored, or a question that you think can be explored with different methodology.
 - One place to look is the *Annual Review of Sociology*, a journal comprised of literature reviews. If there is a piece on your broad topic, it might identify the major debates or sub-fields. You can also ask your adviser for a list of the major books or works on the topic. As you work through the major literature, focus your reading in an increasingly narrow area. Scan footnotes for further references that may lead you to a work that sparks your specific interest.
 - After brainstorming several narrower topics, start developing questions. A research question should be specific: What is the specific phenomenon you are interested in? For whom? In what way? For example, if you are interested in the educational attainment of immigrant students, what specific outcome are you interested in? For what group of immigrants? What do you want to examine that relates to this outcome—language? Culture? Social integration?

- o You can look at past theses to get a sense of the appropriate scope for your research question. A list of prizewinning Sociology theses from the past 25 years (and their HOL-LIS links) is available on the department website: http://www.wjh.harvard.edu/soc/pages/senior_thesis.html. These documents can be reviewed in the Harvard University Archives underneath Lamont Library (hul.harvard.edu/huarc/). To review any other sociology thesis, contact the Undergraduate Administrator.
- o Your question might have two parts, which is fine, since this often aligns with the number of results chapters you will have. It should not, however, have more than three parts.
 - Once you've developed several specific questions, go back to your adviser and others you've consulted to get their assessment of each question.
 - You should also assess your research questions on several bases to see which question will be most fruitful. Ask yourself:
 - Can this question be answered by me in less than a year and around 100 pages?
 - How would I answer this question? Would I need access to a population that is impossible to get a hold of (e.g., celebrities, inmates, government officials, etc.)?
 - Will it sustain my interest over this period?
 - Are the question and my proposed answer of scholarly interest to those who work in the field of study? (This is something your initial foray into the literature and your adviser can help you figure out)

After you have done some brainstorming, ask yourself: is this a narrow question with several possible alternative answers? Is this question sociological? (Your adviser can help you assess this.) Can this question be tested with empirical data?

The table on the following page demonstrates how to move from a topic to a research question.

RESEARCH TIP: LIBRARY RESEARCH

Journals: Key sociology journals are the *American Sociological Review*, *American Journal of Sociology*, and the *Annual Review of Sociology*. You can access them electronically through the HOLLIS catalog (<http://hollis.harvard.edu/>).

How to access library materials:

- The Harvard College Library main page (<http://hcl.harvard.edu>) provides quick links to the Hollis catalog system, E-resources, and the Search function
- The Hollis catalog will lead you to books, journal subscriptions, and digital copies of books and journals as well as links to the E-resources for finding particular articles
- The Search function on **hcl.harvard.edu** is a great and lesser known resource. Click the "Search" field in the upper right and fill in the radio button for Google Scholar. Then type in the keywords for your topic. The results page provides links to the resources owned by Harvard (journals and books) which you can click to directly access the source.
- If you use the Firefox web browser, Harvard has a great plug-in that integrates the library system with the browser itself. The HUL LibX toolbar allows you to search the Hollis catalog, E-Journal list, E-Resource list, Citation Linker and Google Scholar. The plug-in will also work with search results at Amazon.com, Barnes and Noble, the New York Times Book Review, and other search resources that link you directly to Harvard's resources.
Visit <http://lib.harvard.edu/tools/libx.html> for more information.
- The Department of Sociology has relationships with several research librarians if you are having trouble finding sources. Kathleen Sheehan is our department liaison and can be reached at ksheehan@fas.harvard.edu

Examples of Moving from Topic to Research Questions

Topic	Brainstorm Ideas/subtopics	Research Question
Neighborhoods and Health	<ul style="list-style-type: none"> • Neighborhood poverty and mental health • Neighborhood pollution and lung cancer • Neighborhood social networks and obesity 	How does children's depression vary with neighborhood poverty and how do parenting practices mediate this relationship?
Black Voter Turnout	<ul style="list-style-type: none"> • Factors that influence black voter turnout • Gender differences in black voter turnout • Candidates' race and black voter turnout 	How does media portrayal of minority candidates affect black voter turnout?
School resources in Africa	<ul style="list-style-type: none"> • Implementation of resource programs • Differences in local and international resources for schools • Different need for resources in different areas 	How do teachers understand the implementation and goal of the "one laptop per child" program in schools in Zaire?
Media and Beauty	<ul style="list-style-type: none"> • Media use of super skinny models • Men and women's magazines portrayal of beauty • Black, white, and Asian portrayals of ideal body types 	Can racial/ethnic differences in men's conceptions of "ideal body types" be explained by differences in magazines marketed to certain racial groups?
CEO Bonuses	<ul style="list-style-type: none"> • CEOs' ideas about their bonuses • Relation of bonus to productivity • Gender differences in bonuses 	What firm and personal characteristics contribute to CEOs thinking they deserve large year-end bonuses?
Your Topic!	<ul style="list-style-type: none"> • • • • • • 	

Choosing a Methodology: How Will I Answer My Question?

After choosing your research question, you should think about how to answer it! Many different methods are used in sociology, and choosing the right one depends on what you want to say.

Think back to SOC 128—what methods did you learn? Generally, methods in sociology are discussed as being either qualitative—interviews, ethnography, or participant observation—or quantitative—statistical analyses of survey or other sorts of numeric data. In addition, sociologists also use content analysis, historical, or archival methods, which can straddle the boundary between qualitative and quantitative work depending on one’s approach. In some cases, sociologists will use experimental approaches such as scenario methodology or group / team based research that comprises a control and an experimental group.

List of Sociological Methodologies

These are discussed in Sociology 128. Ask your adviser for more information if you are not sure of a particular method or how it might be useful to you.

In-depth Interviews: An interview typically lasting 1-2 hours with each subject; can be both open-ended (without specific questions) or more structured

Ethnography: Observations of a social space; data collection through taking notes on what you observe

Participant Observation: Typically coupled with interviewing or ethnographic observation—you participate in the group or organization that you wish to study to gain more insight into the processes of that organization

Experiments: Experiments involve comparing the outcomes of a treatment group and control group. You might have participants read a statement and respond to it, randomly varying a key word in the prompt.

Survey Analysis: Surveys contain close-ended questions where respondents typically select their response from a list of options

Content Analysis: The researcher looks for key words, phrases, or subject matter in written or video media and assesses how they vary on key dimensions

Historical /Archival: The researcher uses primary source documents (bills, laws, newspapers, letters, etc.) and interviews with key social actors to piece together how a historical event occurred.

Generally, methods in sociology are discussed as being either qualitative—interviews, ethnography, or participant observation—or quantitative—statistical analyses of survey or other sorts of numeric data.

Often, quantitative methods are used to determine patterns and relationships among the characteristics and outcomes of a large group of people. Qualitative methods are used to think about mechanisms behind relationships and to observe social processes in much greater detail.

You should think about what you want to say about your question. Often, quantitative methods are used to determine patterns and relationships among the characteristics and outcomes of a large group of people. Qualitative methods are used to think about mechanisms behind relationships and to observe social processes in much greater detail. There are some things that cannot be easily measured with numbers.

Your question can probably be answered either quantitatively or qualitatively, depending on what your focus is. For example, if your question is: “How does children’s depression vary with neighborhood poverty and how do parenting practices mediate this relationship?” you could analyze survey data that includes information about children’s mental health, neighborhood characteristics, and parenting practices (frequency of reading to a child, for example). This would help identify patterns. Is there a relationship between neighborhood poverty and children’s mental health? For children in poverty, do children with parents who read to them more do better? Often a quantitative approach is helpful if no one in the field has tested the relationship you’re interested in.

A qualitative approach to this question might involve in-depth interviews. You could interview families who live in poor and non-poor neighborhood about their children’s mental health and ask them how they saw their neighborhood affecting their children’s outcomes. You could do observations of the families’ daily routines or collect ethnographic data about the neighborhood to support the interview data. This approach might be helpful if others have established a relationship between neighborhood poverty and mental health but there is debate as to why or how the relationship operates.

You should discuss the methods you are considering with your adviser. He or she will help you clarify how your method best answers the question you are interested in. He or she will also help you figure out how feasible the project is—some populations are difficult to access, and some data collection efforts take longer than 7–10 months.

You should also consider what others who are interested in your question have done. Is there a survey or instrument that everyone seems to use? Is there a variable in a popular dataset that no one has looked at yet? Has everyone done quantitative work and you could fill in some of the gaps in understanding with a qualitative project? Has everyone done qualitative work and you could look at national trends with quantitative data?

Once you’ve decided on a methodology, think about whether you want to collect your own data or analyze existing data. Typically, qualitative projects involve collecting new data. If you are adopting a quantitative approach (e.g., survey analysis), see if there is a dataset that has the data you need for the population you are interested in. You can get codebooks and survey questionnaires from the websites of most major datasets. You should figure out if the data you need is publicly available or if you need to get restricted data access, a process that can be time-consuming and costly.

If you are adopting a qualitative approach, read the methods sections of papers or look for methodological appendices in books on similar topics. Often they will include the interview questions they asked which can help you assess the feasibility of capturing the outcome you’re interested in. Occasionally, there is interview data available for public use from other projects.

Some students use multiple methodologies to answer their research questions. You should consider if using more than one method to answer your question might be appropriate, both to give you a broader research experience and to investigate your

question from multiple angles. Perhaps you can use a national survey and supplement it with conducting qualitative interviews. Perhaps you will combine qualitative interviews with ethnographic observations.

You should discuss your plans with your adviser—he or she will help you figure out the appropriate methods for your project and for the amount of time and resources you have to complete the thesis. Use the worksheet on the next page to brainstorm methodology ideas.

Potential Data Sources: Quantitative National Datasets

- General Social Survey (GSS)
- Panel Study of Income Dynamics (PSID)
- National Longitudinal Studies (there are several surveys including NLSY, CNLSY, and others)
- Current Population Surveys (CPS)
- American Community Survey
- National Assessment of Educational Progress (NAEP)
- Early Childhood Longitudinal Study (ECLS)
- National Household Education Survey (NHES)
- Education Longitudinal Study (ELS)—NELS of 1988 and ELS of 2002
- Schools and Staffing Survey (SAS)
- American Housing Surveys (AHS)
- U.S. Census
- Bureau of Labor Statistics

Worksheet: Choosing a Method

Method	How would I measure my outcome of interest?	How would I measure the factors I think influence this outcome?	How would this completely answer my research question? What couldn't I know using this method?
Interviews	Parents' assessment of child's happiness or parents' report of child seeing a mental health professional	Observations and parents' account of neighborhood and how they think it affects their lives; observations and parents' account of parenting practices	I wouldn't be able to generalize to a broad population, I might not have a "real" measure of children's depression

DEADLINE: Statement of Intent/Adviser Selected
Last Day of Reading Period by 4:30 PM, Junior Year Spring Term

The typed statement of intent, due by the end of reading period of your junior year spring term, includes:

- (1) A description of the thesis topic and a specific statement of your research question
- (2) A brief description of the research design (what kind of methodology will be used—you do not need to provide instruments or sample information yet; how it will be carried out). Concentrate on what you plan to do about the topic, not why the topic is interesting.
- (3) A projected work schedule through the fall term, including summer work if anticipated (e.g., carry out literature review by mid-summer, design instruments by August 1, test it by September 1, collect data by November 1, complete data analysis by December 15, etc.).
- (4) The signature of your adviser indicating his/her approval of the projected schedule and agreement to advise the thesis.

The first three of these should be written in 2-4 pages; the faculty signature goes on a consent form available at www.wjh.harvard.edu/soc/pages/senior_thesis.html or in the Undergraduate Office.

Note: In order to list SOC 99 on your fall term study card, a Statement of Intent must be complete and on file in the Undergraduate Office. Joint concentrators must also file a statement of expectations from their secondary concentration.

Part TWO

Preparing Your Research

Research Tip: Senior Thesis Seminar

This is an optional seminar that meets during the fall and early spring semesters that is open to students enrolled in Sociology 99 (thesis writers). Although it is not required, senior thesis writers are strongly encouraged to attend. The purpose of the seminar is to help you through the research stage of the thesis, to give detailed advice about the writing stage, and to share experience in conducting research. We have run the seminar for many years and it is described as very helpful by previous thesis writers.

Beginning the Literature Review

You've chosen to write a thesis, you've developed a research topic, and you've selected an adviser. Congratulations! Now what?

The first thing you should work on is your literature review. A literature review is an analytical summary of the past work relevant to your topic. An analytical summary is more than just writing a paragraph summarizing the main point of each article you read. In an analytical summary, you should link together the readings to build a story about what has been done and what needs to be done. You should link together the readings under several key theoretical or empirical categories and you should identify key debates within and between these theoretical bodies of work. Who agrees with whom? What are the explanations for their differences (theoretical, methodological, etc.)? Think about your literature review as building up to your hypotheses or as background information for your research question. If you were a reader, what information would you want to know after reading your research question?

For example, if you are writing a thesis about the development of racial identity in mixed race teenagers (TOPIC) with your specific RESEARCH QUESTION asking: "Does the identification with black or white culture vary depending on the teenager's degree of closeness with family members from each racial group?", some key theoretical questions might be:

1. How do sociologists think about identity?
2. How do individuals form ideas about racial identity, specifically?

Some key empirical questions might be:

1. What do we know about family relations in general? Have there been studies to demonstrate if the mother's or father's family is generally privileged?
2. What do we know about mixed race families specifically? Does the white or black side generally become privileged in the family? What factors does this depend on?

Generally, you should consider two to three potential theoretical explanations of your

question. Empirically, you should report on similar studies to the one you've proposed, and you should also report on basic demographic facts about your question. For example, here, you might investigate and briefly report on the number of mixed race families in the U.S.

Once you have brainstormed some key theoretical and empirical issues to investigate, you should start locating sources. First, you should ask your adviser or other faculty members who are experts in your field to recommend seminal books or articles. Often, reading the theoretical chapters or literature reviews of these influential works will orient you to the field and you will learn what the key debates are. Second, you should look in the *Annual Review of Sociology*, the *American Sociological Review*, and the *American Journal of Sociology* for recent articles on your topic. You can link to these journals through the HOLLIS catalog and search through their contents electronically. As you read the most recent articles about your topic, the literature review and works cited list become an important tool to discover other key readings. Third, you should use Google Scholar and other library resources (see Research Tip Box on p. 10). You can sift through these articles to make sure you've found all the key works on your question.

As you search for sources, you should keep a Word document of every source you're potentially interested in investigating. As you find articles or books that look somewhat relevant, you should copy their titles, sources, and abstracts if available into a Word document. You can begin to organize the titles you find by topic. Once you have a working list of sources, you should discuss it with your adviser. It is doubtful that your adviser really has time to go through your works cited list carefully, so you should send an email to them or set up a meeting to report on: (1) What theoretical or empirical bodies of work seem relevant to your question; and (2) Who you think the key authors are/what you think the key works are in each section. That way, they can quickly assess if you've missed a major theorist or finding.

You should also begin reading during this time. Your working source list will grow and shrink as you read and discover what really is and is not relevant to your topic. You should keep notes on each source you read—an example is in the text box below. After you've read about 60–70% of the works on your list, you should start to draft a literature review. Look at recent journal articles for an idea of how to organize it, and how much detail to give on each article. Remember, you should not write a paragraph about every article you read—instead, you should organize the literature review by topic, including key sources as you write.

A literature review is an analytical summary of the past work relevant to your topic. An analytical summary is more than just writing a paragraph summarizing the main point of each article you read.

Example Note Taking Format

For each source you read, make note of:

- Bibliographic information for the article
- What question is the author trying to answer?
- What theories is he/she informed by (briefly)?
- What data or methods does he/she use?
- What are his/her key findings?

- What further research or limitations does he/she point out? How does your research question fit in?
- How does he/she differ from other authors who have written on similar topics? (As you start reading, you should begin to identify the key differences in findings or theoretical explanations in the area you are reading about)
- Other key sources mentioned that you should check out

As you read, you may start to worry that your research question has already been answered. Do not panic! There is always a new twist that you can bring to the conversation or a new subtopic you can explore. Think about whether your topic can *revise* previous work with new data or methods, *confirm* or update general trends or theoretical suggestions, *complicate* or question a generally agreed upon finding with new data or methodology, or *adjudicate* between key debates by testing theories.

The literature review is something you will return to throughout the process of writing the thesis. It will change in scope and length as you refine your topic and start to uncover findings. Having a working literature review earlier rather than later will help you stay focused on your specific topic.

STOP! Thesis Progress Check Time!

You claim to have a research question, and you've done a little reading. Are you ready to begin moving forward towards actually doing your research? Here are a few tricks to test your progress and make sure you really know what your thesis is about!

1. The cafeteria or elevator ride answer: Imagine you are sitting down to dinner with your blockmates, or you see some former classmates in the elevator at WJH. They discover you are writing a thesis and ask you, "What's it about?" This seemingly innocuous question can throw you into a panic! Practice talking about your thesis in *three short and simple sentences or less*. Of course there is nuance and complexity to your topic, but you should be able to succinctly summarize it in three sentences without jargon or technical talk. If you cannot do this, it signals that your idea needs more refinement or you're trying to answer too many questions. Remember, the point of the research question is to narrow down your topic—you can't explain everything.
2. Write, write, write! Writing and re-writing a one paragraph summary of your question and how you plan to answer it will help you make sure your question is logical, specific, and clear. Write your research question down and examine what you've written. Is it specific? If your roommate read it, would he/she know what you were trying to do? Write sub-questions, too—this will help keep you in check and ensure that you are not trying to answer too many questions. It will help you realize what sort of data you need to collect to answer these questions.

Developing and Testing Your Methodology

If you are collecting original data, it is critical to test your instruments. Not testing your instruments will likely result in you not getting the data you really want and being unable to answer your research question. It is recommended that you test your instruments in the summer between your junior and senior year so you are ready to collect data in September.

Data collection instruments vary depending on the method you are using. If you are fielding an original survey, your instrument will be your survey questions along with the directions you provide respondents. If you are conducting qualitative interviews, your instrument will be your interview “guide” or list of questions. If you are doing ethnographic observations, your instrument will be your note taking guide (for yourself).

Surveys

In general, survey questions will collect data that is both exclusive and exhaustive—that is, you will provide your respondents with answer choices that all differ conceptually from one another and that cover all possible answers. For example, if you ask someone about their religion, your categories cannot be “Christian, Catholic, or Jewish” because Catholics are also Christian. You would also be leaving out people who are Buddhist, Hindu, atheist, other Christian denominations, etc.

You need to think carefully about the wording for each survey question. Changing the wording just slightly can alter people’s answers. For example, a March 2009 USA Today/Gallup poll about the economic crisis found that a majority of Americans favor a temporary “government takeover” of major U.S. banks, but only 1/3 of Americans favor a temporary “nationalization” of major U.S. banks. When collecting demographic data (age, gender, education, class, etc.) from your survey respondents, you might consider using questions from the U.S. Census or General Social Survey—that way, you will have categories consistent with national data and questions that you know have been heavily field-tested.

You need to think about how to operationalize your key variables of interest—that is, how will you measure them? If you are interested in students’ anxiety, for instance, how will you ask them about it? Will you use the word “worry?” “Anxiety?” “Nervous?” These can mean slightly different things to different people. You should develop a draft survey and make an appointment to discuss it with your adviser, sending it to them well in advance of your meeting so that you can get feedback. Then you should read through each question with several friends—ask them to read the question and describe to you what *they* think you are asking them. You might realize that the wording you have chosen is not clear. Finally, you should pilot your survey—you should have people that you will not include in your actual data collection fill out the survey, alerting you to any problems they had while completing it. Were your categories clear? Did they misunderstand how to fill out any part of it? Ideally, you should find *guinea pigs* to fill out the survey who have similar characteristics to your actual proposed sample. If you are planning to collect data from non-native English speaking college students, for example, try to find some friends or acquaintances who fit this description to fill out your survey.

If you are collecting original data, it is critical to test your instruments.

Interviews

Think about the main topics you want to ask your respondents, including a category for background information (age, sex, race, etc.). List these topics and start to work on one at a time to develop interview questions.

The strongest interview questions cannot be answered with Yes or No. The point of in-depth interviews is to understand how people experience their situations, and if your questions are yes-no questions, you might as well do a survey! As you develop a list of questions, be sure that none of them can be answered with a simple yes or no—if they can, it is easy to fix them. For example, the question: “Do you enjoy your work?” can be changed to “How do you feel about your work?” Another trick to getting in-depth information is to start your questions with “Tell me about...” Asking someone for a topical life or work history is also helpful—you can say, “Tell me about your work history—how did you end up where you are today?”

You should think of follow-up questions for your interview questions, particularly for those that assess your key areas of interest. Think of a way to restate the question. Often, interviewers ask the same question in several different ways (sometimes at several different points throughout the course of the interview) to make sure they are capturing all aspects of the person’s experiences. You should also be prepared for someone to not understand your question. So be ready to define what you mean by key words in the question.

Once you have a working interview “guide” or “schedule” (as sociologists call them), you should set up a meeting with your adviser. Send the list of questions, organized by topic, to them well ahead of time. After incorporating your adviser’s feedback, you should do several practice interviews where you ask the respondent for feedback. After every question, you should ask the person, “What do you think I’m asking you?” This will help you adjust your wording.

Finally, you should field the interview with several people that you will not include in your actual data collection. You should tape record these interviews and transcribe them. Reading through them, ask yourself: Did I get the information I wanted? Was there a question in the interview that everyone misunderstood? Where do I need more detail? Ideally, you should find *guinea pigs* to participate in mock interviews who have similar characteristics to your actual proposed sample. If you are planning to collect data from non-native English speaking college students, for example, try to find some friends or acquaintances who fit this description to sit for an interview.

Participant and Non-Participant Observation Fieldwork

Doing observations requires an instrument as well—taking notes. While it may be difficult to predict exactly what you will observe, you should make yourself a note taking guide to be sure to capture the key elements of your research question. For example, if you are interested in neighborhood safety, brainstorm what physical and social cues of neighborhood safety you might see—police presence, people walking in large groups, children playing unsupervised, neighbors interacting, bars on the windows, etc. You might categorize these into “physical cues” and “social cues.” This is probably the least detailed note taking guide you can get away with! A better note taking guide might be to have one page per city block and columns to fill in number of people you see, their physical characteristics, if they are interacting and how, number of broken

windows, abandoned buildings, etc. You should always leave room for your own notes and observations that cannot be categorized. The goal here is not to quantify your observations but rather to help you be sure that your observations are systematic—are you looking for the same sorts of things in every place?

After developing a list of things you might look for, you should set up a meeting with your adviser. Send the note taking guide well ahead of the meeting. After incorporating their feedback, you should test your instrument. Go into a similar environment and try to perform some ethnographic observations. Is your guide helpful? What categories have you forgotten? Do you find yourself writing too much—would you rather speak into a tape recorder during observations? After your pilot observations, ask yourself: "Did I collect the data I need? What do I wish I had noticed?" This will help you hone your note taking guide.

Often, you will not be able to test your note taking guide exactly due to access issues. For example, if you are observing classrooms, you may not be able to do practice observations months ahead of time. This is fine. But you should expect the first couple of observations you do to be largely throw-away in terms of data collection. You can hone your note taking guide while in the field. In fact, moving between data collection and data analysis constantly while in the field is common practice for field based researchers. You begin to inductively uncover the interesting things going on in the field once you are there.

Overall, the importance of testing your instruments cannot be stressed enough! This is an integral part of original data collection and should be one of the first things you work on.

Sociology's senior thesis writers iSite has examples of surveys, interview guides, and other instruments. Visit <http://isites.harvard.edu/k61463>.

Choosing Your Sample

Whether you are collecting original data or not, deciding who to study requires careful consideration. You cannot study everyone or everything! The starting point for who your sample will consist of is your research question. Ask yourself: "What groups or people do I need to learn about in order to answer this question? Is there a comparison that I need to make? If so, from how many groups of people do I need to be sure to collect data?"

Qualitative researchers tend to work with small samples of people in order to study them in-depth (typical numbers (N) in the study for professional sociologists can range from 12-100 depending on the methodology). Quantitative researchers tend to work with larger numbers to look for statistical significance (N for professional sociologists can range from 150-200 upwards).

Qualitative samples tend to be *purposive* and *theory-driven* and *diverse*, while quantitative samples tend to be *random* and *representative*. What does this mean? Generally, because carrying out qualitative research takes so much more time and resources, you

cannot afford to select your subjects randomly and hope that you get the variation and representation you need. Instead, you must set boundaries, with the help of your adviser: how many interviews can I reasonably conduct? How many field sites can I reasonably study? Once you know what your goal number is, you must think: what variation do I need to answer my questions? How does relevant theory inform my selection? For qualitative work, you cannot often generalize beyond your sample—but that is not your goal. The goal of qualitative work is more to understand and explain in-depth how people experience social life.

On the other hand, quantitative work is more oriented towards generalizing over a population—the idea is that by collecting data from a large population representative of some “universe,” statistical methods can help you be fairly sure that you are uncovering a “true” relationship for the universe from which you are sampling. The universe is the group you want to study—all Americans, college students, low-wage workers, etc.

If you are not collecting original data but instead are using an available dataset, you still need to think about sampling. Ask yourself what population(s) you need to know about to answer your question. You want to ensure that these populations are included in the dataset you select. Then, you must read the sampling framework of the dataset you plan to use—what strategy do they employ? Who do they intend to be representative of? For example, the Add Health dataset randomly selects 80 high schools from the universe of all U.S. high schools in the country, stratified by region and other characteristics. (*Stratified* by means that they are breaking down the country into smaller groups—so stratifying by region means that each high school was categorized by region and then from each region (South, Midwest, etc.), a representative sample was drawn.) Therefore, they argue that their sample is representative of all high schools in the country. If your research question is about immigrant high school students, you need to think about the limitations of using these data and in your results make clear that you do not have a random sample of immigrant high school students. Sometimes you will not find a perfectly representative sample in pre-existing datasets—this is fine. You just need to understand and point out your limitations in your methodology chapter.

*If you are collecting original **qualitative** data...*

1. Identify the major groups of people or field sites (cases) for which you need information.
2. Identify the number of interviews or case studies you can reasonably conduct, and discuss this with your adviser. Typically, thesis writers conduct 25-50 interviews, but this varies.
3. Develop a sampling frame based on the theories that inform your research question: What comparisons should you make? What demographic characteristics, roles, or social actions do you need variation? This will help you develop a purposive sample. You might not have specific lenses for comparison at the beginning of your project—perhaps your question is about internet etiquette in terms of posting messages on Facebook. Your universe might be college students—that’s fine! That is also a purposive sample—you are interested in a specific population’s experiences, and therefore you won’t sample the entire city of Cambridge hoping to get enough college students but instead you’ll sample Harvard undergraduates. For case studies, perhaps you are interested in charter schools that vary by the background of students they serve. You might do some research as to the demographic makeup of schools around the Boston area and randomly select schools from this list.

4. Often, it is helpful to make a table of the dimensions on which you would like to have variation. For example, if you are studying how female CEOs experience having male subordinate workers, you might be concerned with size of company, age, and parent status of the female CEO. Based on the theories you have consulted, you could develop meaningful categories for these dimensions. Your chart might look like this:

Case Type	Company type	CEO Age	Parent Status
1	Small (fewer than 50 employees)	Younger than 45	Kids
2	Large (more than 50 employees)	Younger than 45	Kids
3	Small	Older than 45	Kids
4	Large	Older than 45	Kids
5	Small	Younger than 45	No Kids
6	Large	Younger than 45	No Kids
7	Small	Older than 45	No Kids
8	Large	Older than 45	No Kids

This sampling “frame” would allow you to compare all configurations of company size, age, and parent status, if these were the dimensions you thought were important. You cannot compare every characteristic or you would have infinite number of case types! Pick the 2 or 3 most theoretically important lenses for comparison and develop a sampling framework based on these lenses. Then, hold other potential variables constant—for example, if we thought race might matter in this example, we would try to sample ONLY white CEOs if race was not one of our key dimensions. Or, we would pay particular attention if most CEOs were white and one was African American for any differences in her experiences.

*If you are collecting original **quantitative** (survey) data...*

1. Identify the major groups of people for which you need information—your universe.
2. Identify the number of surveys that you need to answer your question, and discuss this with your adviser. Typically, thesis writers collect survey data from 150 people or more, but this varies.
3. Develop a sampling frame based on the theories that inform your research question. It may be the case that you want a random sample of some population of people, like college students. However, it may also be the case that you want a stratified random sample—that is, there are subgroups within the population that you want to be sure to be representative of. For example, perhaps you are interested in how internet dating for college students varies by sexual orientation. If you just sample a college population, you might not get a representative sample of minority groups (in this case, gays and lesbians). Instead, you might want a random sample to represent straight men and women, a random sample to represent gay men and a random sample to represent lesbian women.

You may have to over-target minority populations when you are recruiting to get

a large enough sample to say you are representing them, and in fact you may end up wanting to over-represent them. For example, if you want to conduct 200 surveys, and the breakdown of your population is 85% straight, 7% gay men, 8% lesbian women, you would want 170 surveys from straight men and women, 14 from gay men, and 16 from lesbian women. But what can you really say from 14 or 16 surveys? Instead, you might decide that you want to sample 120 straight men and women, 40 gay men, and 40 lesbian women. If you want to make your estimates representative, you can think about weighting your statistical analyses (but you should talk to your adviser about this). Sometimes being “representative” in the sense of representing a group’s experiences (rather than being statistically representative) requires purposively oversampling minority groups.

For both types of work...

Once you’ve developed a sampling frame, think about how to recruit subjects. There are several ways to recruit cases:

1. Sending out recruitment letters, emails, or making phone calls
2. Snowball sampling (starting with one respondent and asking them to give you the names of friends who fit your criteria)
3. Advertising publicly

Each of these methods has limits depending on the need for representativeness—some populations don’t have permanent addresses or phone numbers. Snowball samples might give you very similar people since they are friends. Some people are more likely to respond to a public posting than others. Think about whether these limitations compromise your findings in any way. Discuss the potential problems of sampling strategies with your adviser.

How many subjects do I need?

The number of subjects (or the “N” of your study) varies depending on your method and your research question. You should discuss your target N with your adviser, but here are some general guidelines:

- Survey studies: as big as possible, usually about 150-200
- Interviews: 25-40 in depth interviews
- Field Based Case Studies: 1 to 4—depending on if your study compares several cases or not.

You are now ready to start recruiting! Before you do, you must file a Human Subjects application with the University. Visit www.fas.harvard.edu/research/hum_sub/index.html to learn more about this process. Information on the website will help you discern whether you need Human Subjects approval or not. Be sure to start this process early; there are periodic deadlines for reviewing applications which you should review as early as possible to make sure you can get your approval before initiating the data

collection phase of your thesis.

It is YOUR responsibility as the researcher to follow the appropriate procedures. There are sample consent forms and information sheets on the Human Subjects Committee website, and you should contact someone in the Human Subjects office with any questions. You may also wish to read *The Intelligent Scholar's Guide to the Use of Human Subjects in Research*, available on the aforementioned website.

General Survey and Interview Research

Written and oral questionnaires or interviews where the investigator does not manipulate subjects' behavior or deceive subjects. Data may be collected with or without identifiers; if possible, responses should be anonymous (or identities should not be recorded together with subjects' responses).

May require review, either expedited or full	May be exempt from committee review:
Subjects are minors, or adults not competent to consent, or patients. Research deals with sensitive topics. Identifiers are recorded or linked to data. Subjects are recorded on audio or videotape (with their knowledge and consent).	Subjects are competent adults, no identifiers are recorded with or linked to data, and the survey doesn't deal with "sensitive topics" (illegal or immoral activities, sexual behavior, or any information that could potentially harm a subject's reputation or legal or social standing or employability if it became known outside the research context)

Observation Research

Research where the investigator observes, and perhaps records, public or private behavior. May include interaction with subjects, such as participant observation studies. Subjects' identities may or may not be recorded.

May require review, either expedited or full:	May be exempt from committee review:
Investigator interacts with subjects and/or manipulates subjects' behavior.	Investigator does not interact with subjects or manipulate their behavior, observation takes place in a public location, and subjects' identities are not recorded or otherwise linked to data.
Observation takes place in a private location, or in a place where subjects have reason to believe they are not being observed.	
Subjects' behavior is recorded on audio or videotape.	
Research involves participant observation or other anthropological fieldwork.	

Writing the Prospectus

The prospectus should reflect the additional time you have spent thinking about the topic, discussions you have had with your adviser, and any work you have completed over the summer and early fall term. In 10 pages or so, you should present the problem you intend to examine, explain why you think this topic or problem is worthy of your attention and ours as sociologists, summarize the work you have completed to date, and present a plan of action for completing the rest.

A typical prospectus ought to include the following information (consider this outline a guide, not every prospectus looks the same):

Part 1: Introduction

A one to two page statement of what the thesis is about. Think of this as an abstract for your thesis—if you had to describe what the project is about and how you’re going to answer your question in two pages or less, how would you do it?

Part 2: Theoretical Considerations and Previous Research

A three to four page brief overview of the theoretical perspectives you plan to pursue and what empirical evidence there is about your topic. How can you approach this topic? What is the most compelling perspective and why? What other relevant research has been done on this topic? How will yours add to it?

Part 3: Chapter Outline

Develop a three to five page outline of the thesis, telling in a brief paragraph what each chapter will cover. You may not ultimately follow this outline, but putting it together should help you think out what it is you are doing and identify any gaps in your thinking. Typically, a senior thesis consists of:

- Introduction
- Literature Review
- Description of Methods and Analyses
- Results (often two to three chapters to answer the key sub-questions)
- Discussion and Conclusion (some students choose to make these separate chapters)

Part 4: Bibliography

List the sources you have already consulted and plan to consult in the course of the work. If you’ve followed our advice on conducting a literature review, this part is already done!

Part 5: Progress to Date

Within the prospectus or appended to it should be a report listing the work you have already completed.

Focus on your research question and plan of action in the prospectus. Also, use it to your advantage—often the prospectus can help students organize their thoughts and focus their project very tightly on their research question.

DEADLINE: Prospectus and completed approval form
Friday before 5th Monday (Add/Drop Deadline) by 4:30 PM, Senior Year Fall Term

The prospectus is to be worked out with the advice of your adviser and must be approved by him or her before it will be accepted. You need to obtain your adviser's signature on a Thesis Prospectus Approval Form, available on the Sociology department website or from the Undergraduate Office.

The prospectus approval form is to be turned in by YOU (not your adviser) to the Undergraduate Coordinator by the deadline. Your prospectus should be attached to the signed prospectus approval form. It is up to the adviser to approve the prospectus, approve it pending revisions by you, or to reject it, in which case you will be asked to drop the thesis project. In order to gain quick approval, therefore, you should work closely with your adviser as you draft the document, and s/he will need to see a copy of the completed prospectus *at least* several days prior to the deadline (ask how long they will need to review it).

Collecting Your Data

See Appendix 2 in this guide for information about research funding for thesis writers

Research Tip: Computing Support

Students are encouraged to use the resources of the Institute for Quantitative Social Science (IQSS) (www.iq.harvard.edu). IQSS provides Stata training, individualized data support, and a tool for creating and hosting web surveys (<http://psr.iq.harvard.edu>).

Recruiting Subjects or Gathering Data Sources

Original Data Collection

After developing your sampling frame, you are ready to start recruiting subjects to participate in surveys or interviews. This can be done by sending letters or emails, making phone calls, or advertising publicly with posters or another medium. Keep in mind that your strategy for recruitment might bias your results. Certain groups of people are less likely to have a permanent phone number or to respond to a public ad. You should consider how these potential biases might affect your results.

If you are recruiting through an organization like a school or business, you should work with the Human Subjects Committee and that organization to determine if you need permission from an authority figure like a principal, superintendent, CEO, manager, etc. If so, your approach might be to first send letters to these administrators to gain their approval to undertake your research in the organization over which they have jurisdiction, and then to recruit individual subjects.

Develop a recruitment letter, script, or poster that is brief, describes your project in general terms, and points out any incentives or benefits the participants might receive.

Sample recruitment letter/email:

Hello,

My name is Jane Student, and I am a student from Harvard University interested in what people think about their neighborhoods. I would like you to participate in my project.

Your role: I would like you to complete a brief survey about your experiences. All answers are completely confidential, and you can complete the survey online in the privacy of your own home.

Benefits: The main benefit of participating is to have your voice heard by researchers and to help researchers understand how people feel about their neighborhood and how it affects their lives. As a token of my appreciation, all participants will receive a \$5 gift certificate to BerryLine.

What next? If you are interested, please visit this link to complete the survey:

www.neighborhoodsurvey.com

Do not hesitate to call or email me with any questions, and I look forward to hearing from you!

Thank you!

Jane Student

JStudent@harvard.edu

617.555.5555

Sample phone script:

Hello, may I speak to X please?

My name is Jane Student, and I am a student from Harvard University conducting research on why people become vegan. I got your contact information from my friend Bob Loblaw, who knows you from the Vegan Club. I was wondering if you'd be willing to participate in an interview about your experiences. It should take about an hour, and we can set it up at your convenience. I would really appreciate your participation.

Sample recruitment poster:

Are you a parent of a high school student who is bussed to a school outside your neighborhood?

Spend an hour talking to a Harvard researcher about your experiences and earn \$15!

Please contact Jane Student at 617.555.5555 or Jstudent@harvard.edu if you are interested.

You should expect less than half of the people you contact to agree to participate in your project. Therefore, you should contact many more people than you actually need to satisfy the targeted sample size. You should keep detailed records of every person you contact, the date you contact them, any follow-up communication (don't be afraid to send another email or follow up with a phone call after a week has passed), if they are interested or not, and if you schedule a time for them to participate.

Locating Existing Data

If you are using national datasets or conducting archival/historical research, you will not need to find people, but you will need to find data. Most websites for pre-existing datasets will have detailed instructions about how to access the data. You should search for codebooks and original data collection instruments on the website before you download the data so you know if this data has the variables you think it does and so you only download the data you need—some national datasets can be quite large. Codebooks will list each variable, how it was coded, and the frequencies of responses. Original data collection instruments are the surveys, interview guides, etc., that were used to collect the data. You should download the original data and save it as a “read-only” file so that you always have an original copy regardless of what you do to it next.

For archival or historical research, you should make contact with any local organizations you need cooperation from to obtain their permission to use their data and to verify their procedures to access it. Some archives do not allow photocopying and some only allow researchers access at certain times, so you should begin the process early.

Administering Your Instrument

Whether you are conducting participant and or non-participant observations, interviews, or surveys, there are certain dos and don'ts when actually collecting the data. There are entire courses and volumes of books devoted to methods, but here are some quick tips.

Participant and Non-Participant Observations

- Have an organized system of taking notes. If you plan to just write down everything you see, you will be quickly overwhelmed.
- That said, don't limit yourself to just one type of observation, like counting number of broken windows. Especially your first several times in the field, write down general descriptions as well as specific accounts of things that seem even tangentially relevant to your project. Moving back and forth between your observations, your research question, and the theoretical perspectives you've researched will help you refine your question.
- Record the date, time, and specific location of your observation.
- Jot down notes to yourself not only about what you see, but about your thoughts, interpretations, or experiences about what the observation makes you think (Example: "Block of stores with boards over windows. This seems like a poor neighborhood because there aren't any businesses here").

- Be as specific as possible. If you write down your feelings, e.g., "this seems like a poor neighborhood" and don't offer evidence as to WHY that is the case, that is a problem.
- If taking notes is not possible, think about using a voice recorder or the "memo" function on most cell phones to record your thoughts.
- If recording in the field is not possible at all, devote at least an hour after leaving the field to writing down or recording your thoughts.
- Turn your observation notes (or jottings) into more organized field notes after every visit to the field. You can think of it as a "memo" to yourself or to another researcher about what you found.
- There are several methods to organizing your field notes write-up. You should start off by saying where you went and when.
 - You can organize it by chronological *episode* if you there are four or five distinct events or locations that you observed.
 - You can organize it by *dimension* using important elements to your research question (describe the racial composition, the social class composition, business district, neighborhood institutions (schools, churches, etc.), natural neighborhood boundaries or lines, etc.).
 - These are just suggestions, but your write-up should have some organization to make sure you sufficiently describe the field.

- Your write-up should include your descriptions of what you saw as well as interpretations or assessments supported by this evidence. (Example: The South End seems like a mixed income neighborhood because all the shops on Tremont Street are very upscale, including expensive restaurants, designer boutiques, gourmet groceries, and expensive flower shops, while the shops on Columbus Ave cater to poorer people, including a check cashing store, a dollar discount store, and a secondhand shop.)

Sources to consult:

Emerson, Robert, Fretz, Rachel I., and Linda L. Shaw. 1995. *Writing Ethnographic Field Notes*. University of Chicago Press.

It's also helpful to read the methodological appendices in ethnographies that you find particularly good. Often, the author will reveal what he or she did, and you might find tips there.

Interviews

- Start your interview with easy or noncontroversial questions to gain some rapport with your subject.
- Be prepared to clarify every question on your interview guide.
- Take notes during your interviews—write down key words the person says in their responses to remind yourself to ask what they mean by that. For example, if someone says "That made me feel uncomfortable," ask what they meant by uncomfortable and why it made them feel that way.
- Write follow-up probes into your interview questions, and be prepared to say "Why?," "How?," or "Tell me more" after nearly every response.

- Let the subjects go off topic (within reason)—sometimes this leads to much more insightful answers than your questions can.
- Ask at the end, “Is there anything else you think I need to know about [topic] that we haven’t discussed?”
- Get contact information and permission to follow-up if you have more questions.

Source to consult:

Weiss, Robert S. 1995. *Learning from Strangers*. New York: Free Press.

Surveys

- Provide clear instructions on how to complete the survey.
- If you are conducting the survey in person, be sure to stick to your questions—you can’t offer an alternative response to one subject without offering it to all. Hopefully you piloted your instrument and are confident in your questions.
- Have a standard way to restate or elaborate on any questions for consistency across subjects.

Source to consult:

Rea, Louis M. and Richard A. Parker. 2005. *Designing and Conducting Survey Research: A Comprehensive Guide*. San Francisco: Jossey Bass.

Back up your data using
an external hard drive
or secure online backup
service.

Data Management: Administrative Responsibilities during Data Collection

During data collection, you need to keep your data organized in some way.

If you are undertaking participant or non-participant observation fieldwork...

Keep a field diary separate from your fieldnotes noting when you went into the field, where specifically you went, and notes to yourself about new ideas you want to pursue. Read your observations and turn them into fieldnotes as quickly as possible after leaving the field or you will risk forgetting key insights. Read your fieldnotes over often. Back up your data using an external hard drive or secure online backup service.

If you are conducting interviews...

Keep a spreadsheet of the name and contact information of every subject you contact, any attempts to set up interviews, dates of completed interviews, ID numbers (if you have to keep the interviews confidential), and notes on where the audio and transcript files are in your computer. Keep informed consent signed documents in files (or however you described on your Human Subjects application). Send files out for transcription immediately or transcribe key parts yourself immediately and type up any notes you took during the interview. Back up your data using an external hard drive or secure online backup service.

If you are conducting survey research (whether original data collection or not)...

Keep an original data file once you've entered the data as "read-only." Use the log feature in SPSS and the .do file in Stata to keep track of every way you manipulate the data, and save separate copies of the dataset as you make key changes—i.e., a "cleaned" version, a version with newly constructed variables, a subset of some set of subjects, etc. Back up your data using an external hard drive or online backup service.

If you are undertaking textual analysis or archival work...

Keep a log of every source you access, when and how you accessed it, and keep systematic notes about what you found.

Keeping Your Data Collection Grounded

While collecting data, don't forget about your research question and about the literature review you should be continuing to craft. You should think about how the theories or empirical evidence you are reading about relate to what you're hearing, seeing, or reading about. Are there new questions you'd like to start asking? Are there new theories or empirical studies you need to look for?

Data collection is not an atheoretical enterprise; it is conducted to answer a specific question. Review your research question often—are you really collecting the data you need? Is your research question morphing slightly as you learn more from your subjects? Both data collection efforts and your theoretical framework will shift as you work on the project. It is important to constantly ensure that the data collection is not divorced from the literature review you are conducting. Think of the literature review as laying out the roadmap or framework for your data collection, and move back and forth between these two pieces of the project.

DEADLINE: Thesis Progress Report

Last Friday of Fall Term Reading Period by 4:30 PM, Senior Year

The Progress Report, due in the Undergraduate Office at the end of Reading Period (Fall Term), is your statement of what has been done to date and what remains to be done in order to complete the thesis. A copy of the report should also be presented to your adviser. In December, an Approval Form will be sent directly from the Undergraduate Office to your adviser. The Approval Form asks the adviser to indicate, on the basis of your report, whether or not you should be allowed to continue the thesis project to completion. There is no required format for the Report itself; a page or two should be sufficient. Describe the work you have done so far on the thesis and your plans for completing the remaining research (if any) and writing.

Analyzing Your Data

Every data analysis process will be different depending on the design of your study and the type of data you collect. The following should be considered advice on taking the first and basic steps common to most projects. You should draw on your knowledge from Sociology 128, Sociology 156, your junior tutorial, and the advice of your adviser to develop an analysis plan that fits your project.

Qualitative Data Analysis Basics

Interview and ethnographic observation data is analyzed to identify patterns along key dimensions. The first step in analyzing qualitative data is to code it in a meaningful way. Develop a coding scheme by thinking about what key concepts are important in answering your research question and brainstorming possible categories that respondents' answers or ethnographic observations might fall into. For example, if you interviewed professors about their political views, you might have a concept called "Why they vote" and potential categories might be "civic duty," "belief their vote can/can't make a difference," and "passion for a specific candidate," "(in) convenience," etc. Go through a few interviews with this tentative coding scheme, and then revise the coding scheme according to the new categories that arose in respondents' answers that you did not think of. You can use coding software such as ATLAS ti to code respondents' answers, or you can code by hand by writing in the margins of interviews (or using the "comment" function in Word).

For ethnographic field notes, you might be interested in student-teacher interactions. You might take each interaction as a unit to be analyzed and code your notes about the interaction as "instruction," "disciplinary," or "personal interaction." If you created a note taking instrument that had categories, you might already have interactions coded this way.

How you analyze the data depends on if you are trying to understand variations within cases or between them. By this, we mean: are you trying to explain how one case operates (a neighborhood, a school, an individual life history) or are you trying to identify how variations across cases explain outcomes. Most of you will probably be trying to understand variation between cases. For example, if you are interested in how first-generation college students perform academically, you might compare their success by their race, nativity, family structure, etc.

Once you have coded your interviews, you are looking for patterns either within or between cases. Often, it is helpful to use a matrix or some other visual representation to organize your data and the emerging themes that you find. This might help you see the patterns in the data. For example, you might be interviewing female CEOs of various ages, some who have kids, some who don't. You can create a 2 x 2 table and paste some key quotes in the cells:

	Kids	No Kids
Under 35	Having it All	Choice: Career over Family
Over 35	Unusual Career Paths	Obligation: Career over Family

Reading through all the quotes in each cell, you might realize some common themes occur. This might help you come up with a schema of 4 types of CEOs, as illustrated in the table above. In addition to helping you analyze your data, the matrix can also be used to present actual data excerpts in your writeup.

There will always be exceptions to any patterns you find in qualitative data, and it's important that you examine them rather than ignore them. Can you explain why this particular subject does not follow the general pattern for other respondents like him or her? Does the exception raise a point for further research?

Sources to consult:

Miles, Matthew B. and A. Michael Huberman. 1994. *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks, CA: Sage Publications.

Weiss, Robert S. 1995. *Learning from Strangers*. New York: Free Press.

Develop a coding scheme by thinking about what key concepts are important in answering your research question and brainstorming possible categories that respondents' answers or ethnographic observations might fall into.

Quantitative Data Analysis Basics

Typically, quantitative survey or other types of data will be analyzed using regression analyses in sociology. To systematically analyze your data, start with one variable at a time and work your way up from there. For any data manipulation, use the log file in SPSS or .do file in Stata to keep track of your actions. Save a raw data file before you begin so that you can use it and the log or .do file to re-create any data files if you make a mistake. Keeping a record of your actions is handy because it's something you can share with an adviser if you are having trouble and can't figure something out.

1. Descriptive statistics: The first thing you should do is identify the mean, minimum, maximum, and standard deviation of your key variables. You should determine what your sample looks like—what percent is male, female, black, white, Hispanic, Asian, etc? What is the mean age? Depending on how you've measured your variables, you might present a mean (19 years old) or a distribution (10% are 18-24, 30% are 25-34, 30% are 35-50, and 30% are 50 and higher, for example).
2. Bivariate relationships: After you've determined what each variable looks like on its own, start to test relationships between two variables. These can be correlations or simply cross tabulations ("crosstabs"). Cross tabulations are simply a summary of one variable "by" another variable. For example, a crosstab of race and education would result in a table like this:

	White	Black	Hispanic	Asian
Mean Years of Schooling	12.2	10.9	11.4	12.6

You can use more sophisticated techniques like a Chi-squared test to determine if these differences are “real” or statistical artifacts. A correlation takes things one step further by investigating if the variables are systematically related—if an increase in value on one variable is related to an increase in value on the other. Here, you might test a correlation between a “white” dummy variable (where 1=White, 0=Not white) and a years of education variable and find that the relationship is positive, i.e., being white (having a “higher score” on the White dummy variable) is associated with a higher number of years of education (a higher score on the years of education variable).

3. Multivariate relationships: The next step is to conduct regression analyses where you consider how more than two variables relate to one another. You should select a dependent variable (Y) and test how several independent variables (X's) are related to it. Start with regressing your dependent variable on just one independent variable, and then add from there. You might add variables one at a time, or you might add groups of related variables at a time. When you add in multiple independent variables, you are testing each one “controlling for” or holding the others constant. For example, if you regress income on years of education and dummy variables for race, you are testing the association between education and income within each race group (or conversely the relationship between race and income within each level of education). When you put dummy variables into your models, you need to leave out one group as your “reference” category. How do you know what to put in your models? As an analyst, you will make choices as you go based on the theories you have read and the empirical studies others have done that suggest what variables are important. You will test many more models than you report or than what you typically see in a journal article’s tables.

The specific analyses you employ will depend on your research question. These are basic models to get you started, and you should work with your adviser to identify what additional models are appropriate.

Sources to consult:

Agresti, Alan, and Christine A. Franklin. 2006. *Statistics: The Art and Science of Learning from Data*. Upper Saddle River, NJ: Prentice Hall.

Agresti, Alan, and Barbara Finlay. 2008. *Statistical Methods for the Social Sciences*. Upper Saddle River, NJ: Prentice Hall.

Hamilton, Lawrence. 2009. *Statistics with Stata* (Updated for Version 10). Florence, KY: Cengage.

Content Analysis Basics

If you are analyzing texts or other media, you will employ content analysis. Like qualitative and quantitative data analysis, you are looking for patterns in your data.

First, you should categorize your data by source—what country did it come from, what type of media (newspaper, magazine, etc.), what time period is it from. Then, you are ready to begin the textual analysis. You might want to start by developing a coding scheme for the titles of the sources. Think about the possible frames the articles might use, develop potential categories, and begin coding. After 5-10 articles, see if there are any new potential categories you didn’t think of. For example, if you are interested in how media framed the Abu Ghraib prison scandal, your title categories might be:

- 1-Torture
- 2-Sexual abuse
- 3-Failure of leadership—civilian (Rumsfield, Bush)
- 4-Failure of leadership—military (Generals, commanding officers)
- 5-Evil or bad soldiers
- 6-Unprepared or untrained soldiers
- 7-These things happen in all wars
- 8-Iraq war a mistake—anti-war message

Next, you should begin to look at the contents of the media. You should choose a unit of analysis—are you coding each paragraph? Each page? Each article? Each 10 seconds? Each minute? Then, you can either code using key word frequency counts or more holistic themes. You would think of two or three key words that operationalize each potential frame or category. For example, in the Abu Ghraib example, you might code the number of times the word “torture” is used versus “interrogation.” Or you might code each paragraph or page for what it is mainly about—using the same codes as for the titles. You might also want to code the sources quoted in the media—for example, are American political leaders quoted? American military leaders? Iraqi citizens? Families of soldiers?

After you have coded your data, you are ready to start looking for patterns. Depending on your question, you might be looking for differences by media type, national origin, time period, or target audience, just to name a few ideas. You might compare the mean number of times the word “torture” is used in American versus European media, for example. Or you might compare the number of titles that you coded as the Iraq war being a mistake by time period.

Part five

Drafting the Thesis

There are many ways to organize your thesis, and not all theses will have the same number or types of chapters. However, the following section identifies the basics that you should cover in some way in your thesis, whether organized as separate chapters for each part or organized in another way approved by your adviser. Here are some tips before you start:

- Don't think of the actual writing process as something you do at the end of the thesis project. You should continually be writing and revising your thesis to ensure that all of its parts are working towards telling the same story. If you write your introduction and literature review in the fall and don't look at it until the spring, it might not be relevant to the data you have decided to collect.
- You don't have to write the thesis, or even individual chapters, from beginning to end—you can start in the middle, with methods details or historical context, for instance. This is sometimes a helpful place to start because you are reporting on what you did or what you already know. Many students find it helpful to start with the literature review, which will provide important background insight, and write the methods section as data collection is undertaken. Often, the introductory chapter will be written last.
- Don't panic at the thought of writing a 60-100 page paper! You are not sitting down and writing it all at once—if you break it up and think about each chapter as a piece of the puzzle, the task becomes much more manageable. Working on one section at a time does put your thesis at risk of not hanging together as a coherent project, so re-read other sections often and reference ideas you bring up in your introduction and literature review as you discuss your methods, results, and conclusion.
- Many students find it helpful to outline each chapter. The pages that follows identify the key components of each chapter or section, which can be used as an outline suggestion.

Sociology's senior thesis writers iSite (<http://isites.harvard.edu/k61463>) has examples of each component of the thesis (introduction, literature review, etc.).

Overview

The following components are typically included in a senior thesis:

- Introduction: 5-10 pages
- Literature Review: 10-20 pages
- Description of Methods and Analyses: 10-15 pages
- Results (often 2-3 chapters to answer the key sub-questions): Each chapter is 15-20 pages

- Discussion and Conclusion: 5-15 pages (Some students separate these into two separate chapters, but many combine them into one chapter).

Think of your senior thesis as if it had an hour glass shape. You expose your reader to a broad idea of what your thesis is about through the title or an abstract. Use the introduction to guide the reader to the narrower research question that you focus on. The literature review further situates your specific research question in a larger body of knowledge. The methods and results chapters are very narrow—they focus only on what you did. The discussion is where you interpret your findings, rather than just reporting on them. Here, you start to think more broadly about the literature that you reviewed and you link your specific findings to a broader body of research. Finally, the conclusion brings your reader back to broader themes. How can your work be extended? What other questions does it raise? How does it relate to other issues?

Introduction

Generally the introduction is 5-10 pages. The goal of the introduction to your thesis is to:

1. Identify your research question(s)
2. Briefly outline the major theoretical debates or bodies of work with which you are engaging
3. Provide a brief overview of the methods you use to answer your question
4. Make the case that your research question is important or that answering it makes a contribution
5. State your key findings briefly. Tell your reader what you found, and then you will use the rest of the thesis to explain how you discovered it and the details of the findings.
6. Provide a roadmap or overview of the entire thesis to your reader. Use clear and simple language: "First, I will review the relevant literature. Then I will describe the methodology that I used to investigate my research question," etc.

Sitting down with a blank screen in front of you and writing that first sentence can be the hardest thing to do! Begin by stating your puzzle: what question are you trying to answer? Make the case that your question is important. This does not have to be (and should not be) a grand statement about how you are single-handedly solving a great social problem. But you should identify why learning more about your question may be important for the group you study, for policy, for popular understanding, etc. Two common approaches to start the thesis are to use particularly interesting or demonstrative examples or quotes from your data collection or to use an anecdote to illustrate the importance of your topic.

You should then identify the possible theoretical or empirical explanations for your question. This is not the literature review; keep this discussion brief. You should state the key possible theories that you will discuss in your literature review and identify the problems or limitations with these explanations, or you should discuss the major empirical evidence about your question and what is lacking about it.

Then you should briefly describe what you do. What methods do you use to answer your question? You will write an entire methodology section so you should keep this brief, but identify whether you are using surveys, interviews, ethnography, etc., and the population you studied.

Don't think of the actual writing process as something you do at the end of the thesis project. You should continually be writing and revising your thesis to ensure that all of its parts are working towards telling the same story.

Your introduction will likely evolve as you go through the thesis process and refine your research question and the results you choose to present. Think of your introduction as a preview of the rest of your thesis.

Literature Review: Setting Up Your Thesis

The goal of a literature review is not just to summarize past research; it is to identify two or three theoretical arguments or empirical bodies of work in which you situate your research question. You need to connect your research question to a larger body of research, both theoretically and empirically. Generally, the literature review is 10-20 pages.

There are several ways to organize your literature review. One option is to separate it into theoretical and empirical sections. Within those sections, you can then identify the two or three major substantive topics relevant to your question. Another way is to integrate theoretical and empirical work and organize your literature review by substantive topic and discuss the theoretical and empirical findings relevant to that topic. For example, if you are studying neighborhood gentrification, you can organize your literature review like this:

A. Theoretical explanations for gentrification

1. Production-side explanations for gentrification
2. Consumption-side explanations for gentrification
3. Political economy explanations for gentrification

B. Empirical studies of gentrification

1. Prevalence in the U.S. over time
2. Effects on residents
 - a. negative consequences
 - b. positive consequences

Or you can organize a literature review like this:

A. Production side explanations for gentrification

1. Evidence of prevalence based on measuring housing prices
2. Definitions and evidence of consequences from this theoretical perspective

B. Consumption side explanations for gentrification

1. Evidence of prevalence based on cultural shifts
2. Definitions and evidence of consequences from this theoretical perspective

C. Political economy explanations

1. Evidence of prevalence based on policy changes
2. Definitions and evidence of consequences from this theoretical perspective

You should not think of your literature review as writing one paragraph about each work you read and linking them together with a concluding paragraph. Instead, your literature review should be organized in a way that allows you to build to a point and you should integrate the evidence you've gleaned from several works to support this point. You should provide a moderate level of detail about each study—e.g., the dataset or methodology used and the major finding. But rather than just listing this information, you should employ it strategically by comparing or contrasting it with other work to support your main idea about this body of work.

The culmination of the literature review should be a discussion of how your thesis fits into past research. Are you filling a hole? Testing or applying a theory? Expanding empirical work? At the end of the literature review, it's often helpful to include a more developed or detailed version of the research question now that your reader has been provided with an overview of related research.

Data and Methods

The goal for this section is to explain to your reader what you did—both how you collected data and how you analyzed them. You can separate this into two separate chapters if you would like. Generally, this section is 10-15 pages.

Data

Walk the reader step-by-step through the process through which you gathered your data or how the data were collected by an outside agency. Start with the six important questions: when, where, who, how many, how, and why.

- When: Over what time period were your data collected? Is it from one time period or are there multiple time periods?
- Where: Is your data from one city? Is it national? Is it from multiple countries?
- Who: Describe the final analytic sample of subjects (or source materials, in the case of content analysis/historical projects). What characteristics does the population you studied have? Are you analyzing a subset of the data? How did you choose this population to work with?
- How many: How many cases do you have overall? How many cases are in each key subgroup? What was the response rate?
- How: This encompasses how the data were collected, how the key variables are worded, etc. Did you collect the data or is it from a secondary source?
 - Describe your sampling method: How did you contact them? If you're considering a case in-depth, how did you select your case? If you're doing content analysis, how did you select the data you analyzed? If you are not collecting original data, how did you select the dataset you used? Describe the sampling methods of this dataset—what is the population?
 - Describe your instrument: What kind of instrument did you use? About how long did it take for each subject to complete the data collection process? If you're doing an ethnography, how often did you visit the field? How long did you stay in the field? What did you do while you were there? If you are doing content analysis, where did you access the media you

You should not think of your literature review as writing one paragraph about each work you read and linking them together with a concluding paragraph. Instead, your literature review should be organized in a way that allows you to build to a point and you should integrate the evidence you've gleaned from several works to support this point.

analyzed? If you are not collecting original data, describe what those researchers who actually collected the data did—interviews, surveys, etc. You should include your instruments (surveys, interview questions, etc.) as an appendix.

- o What variables were measured? Limit in-depth description to your key dependent and independent variables. How are you conceptualizing and operationalizing the variables, both dependent and independent? It's also a good idea either here or at the beginning of your results section to provide a description of the sample in terms of key variables. You should report on the frequency or average scores for key dependent and independent variables, whether you are doing qualitative or quantitative work. Let the reader know what the sample looks like on key dimensions—what is the racial/ethnic, gender, class, or other key variable breakdown? If you are doing ethnography, describe the field—what are the demographic characteristics of the organization, school, neighborhood, etc.?
- Why: As the researcher, you have made countless analytical decisions along the course of your work. You need to provide a justification for virtually every methodological choice that is made. This does not have to be a long or complicated defense, but you should discuss why these choices about what data were used or collected were the optimal ones, or at least appropriate to your question.

Methods

Start with the six important questions: when, where, who, how many, how, and why.

After describing your data, you should tell the reader what you did. For qualitative, non-participant or participant observation, in-depth case study, or content analysis research, you should describe your coding scheme. You can include the entire coding rubric as an appendix if you would like. For quantitative work, you should describe your basic models and you might want to provide simple regression equations for them. You cannot describe every model you ran, but if you tested two or three main dependent variables or if you used two or three sets of independent variables, you might describe these two or three key models. This section should outline what you did, which you will return to when you write up your results.

Hypotheses

You do not need to state specific hypotheses in your thesis, but if you'd like to, a logical place to include them would be immediately prior to the methods section. What hypothesis are you testing with each model? What theoretical or empirical research informs your hypotheses?

Throughout your discussion of your data and methods, you should keep your literature in mind and integrate it into your writing. What theories were your instruments or models designed to test? What new populations, questions, or methods do you use that past empirical research did not explore? Considering your literature review at all stages of the thesis will help your project come together as a cohesive piece of work.

Source: Miller, Jane E. 2005. *The Chicago Guide to Writing about Multivariate Analysis*. University of Chicago Press.

Results

The number of results chapters you write should be driven by the number of sub-questions you ask, the number of methods you use, or an inductive division that arises from the findings. Generally, students write 1-3 results chapters, each 15-20 pages long. In each results chapter, you should tell your reader what you found! Here, you are describing the findings, but offering limited interpretation. The bigger picture interpretation occurs in the discussion section. You should organize the results section by identifying

1. What specific sub-question you are trying to answer
2. How you are answering it—what analyses you are using
3. What you found
4. How your findings support any original hypotheses you might have had or how your findings fit into the research you reviewed in your literature review

If you haven't presented a table of descriptive statistics for your sample and the key variables you use, you should include it at the beginning of your results chapter.

At the beginning of each results chapter/section, state what question you are trying to answer—are you testing a hypothesis? Are you trying to identify patterns? Then state what you did. If you are doing quantitative analyses, briefly describe the regression or statistical test you are using. For example, you can say, "I regress educational attainment on religion, controlling for age, race, sex, and mother's education." If you are doing qualitative analyses, briefly describe what topics you are analyzing.

Then you should present your findings. You should walk the readers through both (1) what analyses you conducted; and (2) what you found. For quantitative data, you should start by describing your simplest model. Often this includes control variables that will be present in every subsequent model. This is a good chance to briefly describe the coefficients for control variables once, and you should not return to them in subsequent models unless they change in a way important to your research question.

Typically, students doing quantitative work run many more models than they include in their tables. After a simple model with control variables, start adding your key independent variables to the tables that you present. Sometimes it makes theoretical sense to include a separate column in your table for each new independent variable, sometimes it makes sense to combine them into groups of related variables. This decision is something your adviser can advise you on, and you can also look through journal articles to see how others have presented their results.

If you present any tables or figures, you need to walk the reader through each part of the data presentation by describing the key findings of that table or figure. You should focus on answering the main question you are asking rather than trying to describe every single pattern or significant coefficient you found. For example, you can say, "In column 1 of Table 2, the positive and significant coefficients for the Catholic and Jewish dummy variables suggest respondents from these groups have higher educational attainment than Protestants, the referent group." You don't have to walk through the results for the control variables for every model, but if the main relationship you care about changes when you enter in control variables, you should identify this and hypothesize some explanations. As you discuss your tables, do not divorce this part of the

Considering your literature review at all stages of the thesis will help your project come together as a cohesive piece of work.

thesis from the literature review and framing that you have done—identify what potential theories are relevant to what you are testing and note whose work your findings do or don't support.

If you are doing qualitative analyses, your data will most likely be in the form of interview quotations or ethnographic observations. You should organize these to tell a story, rather than simply presenting interesting quotes. You might want to present a table or some other visual representation of the themes that you uncovered. When selecting quotations, keep them brief and pointed. You should set up the quotes by describing the respondent (age, gender, and/or other key analytic variables you study). You can also set the context by paraphrasing what the conversation was about and then insert the respondent's direct quote. Summarize main themes as you go along—often students organize one results chapter into several smaller sections by theme. At the end of any given section or chapter, identify the major theme you identified in the data.

Presenting Tables and Figures

If you present any tables or figures, you need to walk the reader through each part of the data presentation by describing the key findings of that table or figure.

1. Start by presenting descriptive statistics about your sample. This is almost always Table 1. Both qualitative and quantitative researchers should present a table about their sample, but these will look a bit different. For qualitative researchers, you should present a table showing the key characteristics of your sample in terms of the number of respondents of each type and perhaps mean values for key traits. However, your sample size is likely quite small, so presenting means, standard deviations, or percentages might not mean much for a sample size of 30. Instead, you might do something like the following to tell your audience who is included in your sample on the key sampling dimensions:

Table 1. Key Characteristics of the Interview Sample

	White Students	Black Students
High SES	8	7
Low SES	6	8

Then you might have a table showing the distribution of other variables that play a big role in your analyses by the dimensions above.

	White-High SES	White-Low SES	Black-High SES	Black-Low SES
N Foreign Born	2	2	4	1
N Single Parent Home	1	3	3	5
N First-Generation College	1	3	2	4

Some qualitative researchers include few (or even no) tables. You should work with your adviser to figure out the best strategy for you. You must describe your sample in some way and often a table is a clear and simple way to do so.

For quantitative researchers, you should present descriptive statistics (means, standard deviations, percentages, etc., depending on the variable type) for every variable that makes its way into a later analysis. You do NOT need to present descriptive statistics on every variable in your survey or every variable you explored, just those that made it into the later analyses that you present. Here is a sample descriptive statistics table:

Table 1. Descriptive Statistics of the Sample

	Mean	SD
Dependent Variables		
Income	\$50,000	\$12,000
Independent Variables		
	Percent	
White	60%	
Black	13%	
Hispanic	18%	
Asian	9%	
Male	49%	
Married	68%	
	Mean	SD
Educational Attainment	11.6 years	3.4 years
Father's Educational Attainment	9.8 years	2.4 years
Age	34.7 years	6.9 years
Number of Children	2.3	1.9
Age at Marriage	26.5 years	4.6 years

Note that for some variables, it does not make sense to provide a mean and SD. You might have a variable called "Race" in your dataset coded 1=White, 2=Black, 3=Hispanic, 4=Asian, but presenting a mean for "Race" of 1.5 and an SD of 2.3 does not make sense. Instead, you should present these as dichotomous variables—White, Black, Hispanic, Asian—with the percent of respondents

belonging to each group. The same applies to things like gender, marital status, etc.

2. For quantitative theses, you next present your multivariate analyses. Your descriptive statistics were not about relationships between variables, but just summaries of variables. You should next present any relationships between two variables—correlations, means tests, Chi-squared tests, etc. These tables are fairly straightforward to present—you need to include the statistics showing the relationship (the correlation, the mean, etc) and perhaps an indicator of statistical significance.

Presenting regressions might prove more puzzling. You will present a very small proportion of the total number of regressions you run in Stata. It is up to you as the analyst to decide what models deserve presentation. Some general rules:

- a. Start by presenting a simple model predicting your outcome variable with only your basic control variables. Control variables are independent variables that you are not particularly theoretically interested in. For example, you might suspect that race, age, and gender will affect one's income, but it is not part of your major research question—you are more interested in (1) one's educational attainment, (2) one's father's educational attainment, and (3) how your own family characteristics affect income. So model 1 in your regression table would just include dummies for race, your continuous age variable, and a dummy for gender. You should present coefficients and standard errors for each variable along with your constant (intercept), N (number of respondents in the model), and an R2 or some other "goodness of fit" variable.
- b. Next, you should begin presenting your key independent variables. Typically, you would enter these one at a time, or, in a theoretically driven way, you might present various models with multiple key independent variables. See the table below for an example of entering key independent variables one theoretically intuitive group at a time (numbers are completely made up!).

Table 2. Regression analyses predicting income

	Model 1: Controls	Model 2: Education	Model 3: Father's Education	Model 4: Family Characteristics
Black	-500.933*** (101.224)	-200.933* (100.224)	-144.302* (56.302)	-200.933* (100.224)
Hispanic	-601.789*** (140.339)	-150.789 (80.930)	-132.021 (86.301)	-150.789 (80.930)
Asian	-200.678*** (89.902)	60.220 (87.220)	102.399** (41.201)	60.220 (87.220)
Male	1000.433* (499.300)	500.220* (249.521)	450.391* (201.220)	500.220* (249.521)
Age	450.224** (200.133)	110.392* (50.693)	150.102* (72.401)	110.392* (50.693)
Educational Attainment		600.201*** (150.201)		
Father's Educational Attainment			120.201* (55.490)	
Married				301.220*** (84.201)
Number of Children				104.301 (99.201)
Age at Marriage				-93.209 (90.102)
Constant	25400.520	18022.301	15103.201	16102.011
N	4028	4028	4028	4028
R2	0.359	0.499	0.398	0.411

Notes: Linear regression coefficients are presented with standard errors in parenthesis. White is the referent category for race.

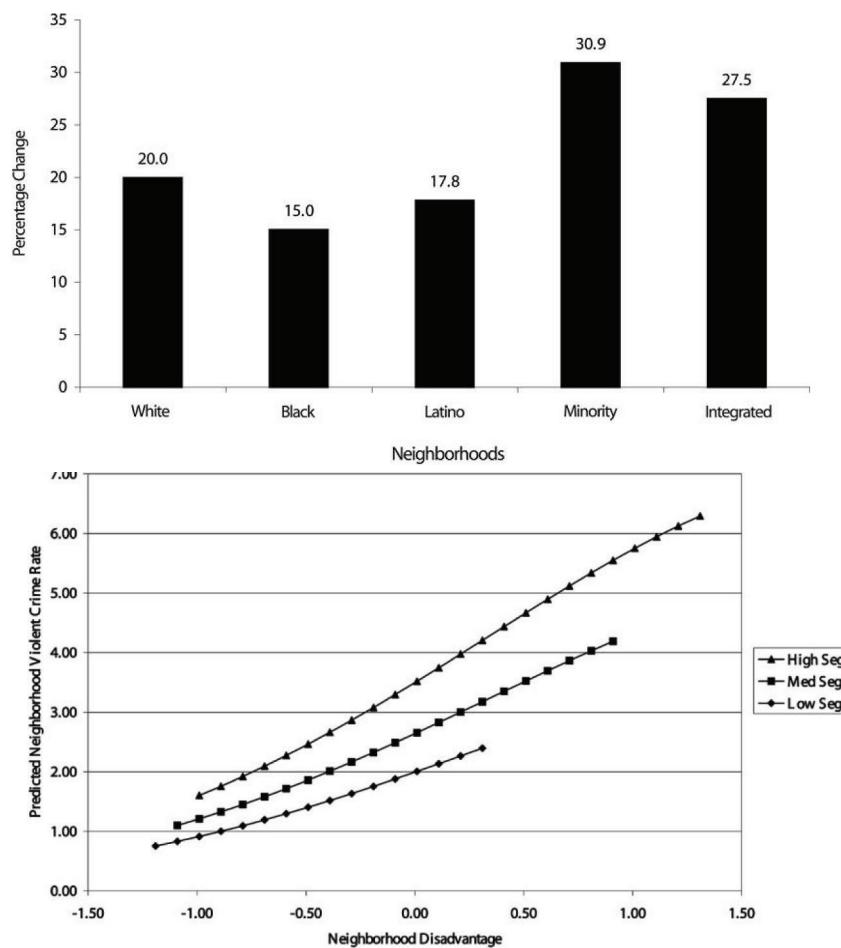
*p<.05, **p<.01, ***p<0.001

Note that the table includes a title, table notes, clear variable labels, and the same number of digits after the decimal for all coefficients and SEs.

c. The next steps depend on your research design. Perhaps you are testing these relationships separately by racial/ethnic group. Then you would have a separate table for each group. Perhaps you are using different ways to measure education, so you would have another table showing these different measurement options. Perhaps you are testing multiple independent variables, so you would have a different table for each. Work with your adviser to figure out how to best present your data.

Both quantitative and qualitative researchers might want to include figures in their theses. Figures include charts, diagrams, and schemata. Charts generally present data in the form of a bar chart, pie chart, or line chart (showing trends over time, for example, with the X axis being year and the Y axis being the variable of interest). Maps are also becoming increasingly used in the social sciences and presenting a map of your fieldwork site, for example, might be helpful to your reader. As is the case for tables, include clear titles for each figure and clear labels telling the reader what data are being presenting.

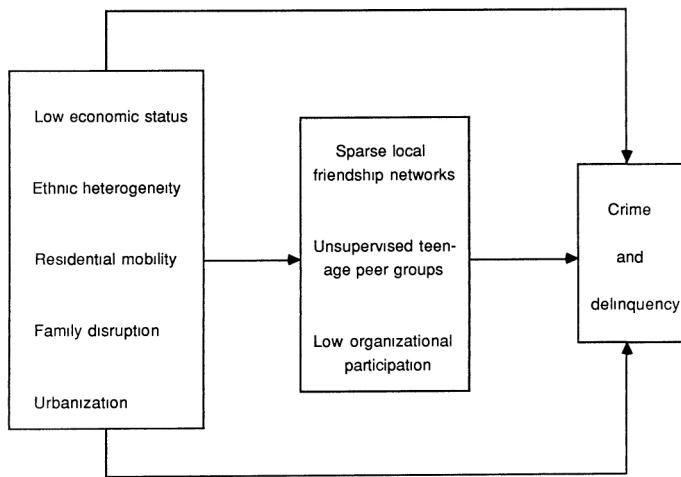
Charts can be used to emphasize key findings rather than reporting them in a table. For example:



Source: Krivo, Lauren J., Ruth D. Peterson, and Danielle C. Kuhl. 2009. "Segregation, Racial Structure, and Neighborhood Crime." *American Journal of Sociology*, 114(6): 1765-1802.

Diagrams and schemata often are more conceptual or theoretical. A diagram might show how key concepts relate to one another. For example:

Figure 1: Causal model of extended version of Shaw and McKay's theory of community systemic structure and rates of crime and delinquency



Source: Sampson, Robert J. and W. Byron Groves. 1989. Community Structure and Crime: Testing Social Disorganization Theory. *American Journal of Sociology* 94: 774-802.

Discussion and Conclusion

The Discussion and Conclusion chapter(s) is typically 5 to 15 pages long. Most students combine Discussion and Conclusion chapters; it is up to you and your adviser to decide what is most appropriate for your thesis. The goals of the discussion and conclusion sections are to:

1. Re-summarize your main findings. In the results chapters you should go into detail and describe each table you present. However, this can result in your reader getting lost as to what the most important findings are. In this chapter, you should return to your main research questions and state what you found with regard to these main points. One organizational strategy is to state the key findings at the beginning of the chapter, divide the chapter into one section about each main finding and then interpret the findings as described below.
2. Interpret your main findings. This differs from simply describing the findings because rather than just stating what the patterns and trends were in your data, you are beginning to answer the "so what" question. Though you are stating your key findings rather than going back into detail about everything you found, you should consider all of your more nuanced findings holistically to determine: what have you discovered about the social phenomenon you set out to study?
 - a. For example, in your results chapter you might have the finding: Being from the poorest neighborhood compared to one's schoolmates is negatively associated with high school graduation. In your discussion section, think about what this means in the real world: If two children from the same poor neighborhood went to two different schools, the one attend-

In this chapter, you should return to your main research questions and state what you found with regard to these main points.

ing school with children from similarly poor backgrounds would actually do better in school because he does not face the relative deprivation of being poorer than his schoolmates. You can then expand on this idea in terms of how it fits into the literature you've studied (is it what you expected to find?) and begin to think about real world implications.

- b. Another example: Perhaps you've found: In an interview study about being a first generation college student, the majority of students mention feeling like they "code-switch" in terms of language and dress when they are on the college campus compared to when they are at home with family. In the discussion section, you can think about how this relates to literatures you've studied: What does this mean for identity? For social mobility or social reproduction?
3. Discuss any methodological limitations that may bias or compromise your findings. It is important to be honest with your reader rather than trying to hide something you wish you had done differently. Identify any problems with your sampling, instrument, or analyses that might possibly impact on your findings. Do not undercut what you've done; your findings are probably true and well studied! But if there is something you wish you had done differently because it compromised your project or because you didn't get as much information as you wanted, mention it briefly.
4. Discuss implications of your findings and suggestions for future research. You can think about this in several ways. What does your study suggest for policy? For the social lives of the group you've studied? For the way we study the question you undertook? Again, it's important to find a balance between underselling the importance of what you've done and claiming that you have single-handedly solved debates that have been occurring for generations. Your adviser can help you find the proper language to adopt.

Think back to the hourglass analogy—the discussion and conclusion sections are your opportunity connect your work with broader issues.

Think back to the hourglass analogy—the discussion and conclusion sections are your opportunity to connect your work with broader issues. In the results chapter, you've spent considerable time going into the details about your findings; now it is your opportunity to help the reader make sense of the most important things you found, what they explain about the social phenomenon you set out to study, and how the findings fit into the larger literature. Speculate on policy implications. If you would expect to find your results across social groups or in different time periods, be creative about what other questions should be explored. The conclusion is in some ways a summary, but it is also a window into future research possibilities (not necessarily for you, but for others interested in this topic).

Basic Writing Tips

Your first draft will not be what you turn into the department, so don't panic if you think it is not a masterpiece! It's easier to revise, add to, edit, and work with a draft than a blank screen. Get something down on paper and use the advice of your adviser and peers to turn your thesis into that masterpiece.

Here is some advice to think about as you write:

- Use outlines: For every chapter, outline your task as a writer. What do you have to tell your reader? Outlines will help your thesis have a clear structure and it will help you stay on point. You can make your outline quite specific or broad, but this is a critically important piece of advice!

- Keep a writing schedule and timesheet: Block out large chunks of time to turn off the Internet and actually write! Also, log how much time you've actually spent writing each day and what you accomplished—this will help you identify your best writing times of the day.
- Work on the project every day: It's difficult to go back to something after you've set it aside for a few days. Even if it's just for 30 minutes a day re-reading something you wrote the day before, try to block out thesis time every day to write. This also helps you keep all the parts of the thesis connected—if you write the literature review in September and never go back to it, your findings aren't going to be written with that framework in mind and the project won't be very cohesive.
- Think about your audience: Think of your thesis as a scientific document. Adopt a somewhat formal or technical tone, but also be sure to explain any key terms, jargon, etc. Look at the books and articles that you have found particularly effective in communicating the main idea and findings—how do they organize the write-up? What do they do to help the audience understand what they did? Your roommate should be able to understand your thesis, what you did, and what you found regardless of their concentration.
- Explain key terms: Your thesis may use terms that have special meaning to sociologists. Be sure to define these terms the first time you use them. The depth of your definition should reflect the importance of the term to your overall paper. You can use brief examples to illustrate what you mean.
- Focus on one key argument or point per chapter: This is especially important for the results chapter(s). Work with your adviser to decide how you should break up your research question and what warrants a separate chapter.
- Avoid passive voice: You did the research! Therefore, it is OK to say "I interviewed fifty sailors" rather than "Fifty sailors were interviewed." However, statements like "I think" or "I feel" should be avoided—if you have an argument to make, state it and support it with evidence. There is no need to begin with "I think..."
- Edit!: You should expect to delete a significant portion of the material you write in your first draft. Read your work over critically, and if material is no longer relevant to your main point, omit it. A shorter but coherent and focused thesis is superior to a longer thesis with irrelevant material.
- Keep direct quotes from reference materials sparse, short, and sweet: Most of the time you should be paraphrasing, but you will likely have several quotes scattered throughout your thesis to drive home key points from the readings—i.e., points from the text that you cannot possibly restate better yourself. Don't use TOO many, though; and unless absolutely necessary, quotes should be kept as short as possible (e.g., one or two sentences). Beautiful quotes that you took the time to dig up will stand out to your reader.
- Cite sources appropriately: Use an author-date citation in parentheses (rather than footnotes or endnotes) to cite the source or authority for every important statement of fact, every quotation, and every idea or inference derived from another writer. A bibliography must be included at the end of your thesis. Include only the books, articles, and primary sources that you have cited in your thesis. Refer to the Harvard Guide to Using Sources (<http://usingsources.fas.harvard.edu>) to ensure that citations are used appropriately.
- Style: The department has no specific rules regarding style (e.g., forms of tables and charts, chapter

Your first draft will not be what you turn into the department, so don't panic if you think it is not a masterpiece!

headings, bibliographical citations). The American Sociological Review publishes its citation rules twice a year as the first couple pages of the journal and you are encouraged to use those, but you are welcome to use any standard format as long as you give due acknowledgment to the work of others that you have used. You may also want to reference the most recent edition of the American Sociological Association's Style Guide. We have included an abbreviated version on page 59. Discuss these issues with your adviser. Be sure that whatever style you choose you use consistently throughout the thesis.

Plagiarism is grounds not only for a failing thesis grade but for action by the Administrative Board.

There are many resources around the Harvard University campus to help you with your writing. In the Department of Sociology, we have a Departmental Writing Fellow, whose contact information can be found on the undergraduate page of the department website. The Writing Center also provides senior thesis tutors. You can find information about this program at the Writing Center website.

Revision, Revision, Revision

Incorporating Adviser Feedback

There are many resources around the Harvard University campus to help you with your writing.

At the beginning of your advising relationship, you should have discussed the number of drafts your adviser will read and his or her requirements in terms of time. As you are writing, you should also discuss your adviser's willingness to read chapters versus full drafts—rather than sending your adviser the whole document at the end of the process, it is probably most effective to send them a draft of each major section as you complete it, and then send them a full draft near the end of the process. Ask them how much time they need to read and comment on a chapter or draft and respect their time.

Your adviser might give you specific comments on the draft in terms of word choice, organization, etc., or they might give you broader comments on changes you should make. Either type of comments is helpful. You should not incorporate their feedback blindly. If you do not understand why they are asking you to make the changes, you should ask them to explain it. If you disagree with their comment, you can respectfully explain why you chose to do what you did and ask their opinion on your logic. Sometimes, they will agree with your logic but give you pointers about how to make it clearer to the reader. The most important thing is that you understand and discuss why changes are being suggested and you communicate about it.

When giving your adviser a new draft, it might be helpful to explain how this draft has changed from the last draft—note any major changes you have made. If there are major suggestions from your adviser that you have not incorporated, you should note why to let the adviser know that you aren't just ignoring their ideas.

Working with Many Moving Parts

To make the project less daunting, it is easiest to break the thesis into small sections and work on one section at a time. However, this strategy runs the risk of the writer ignoring the sections that are “finished.” You should set aside time to re-visit the

introduction and literature review to make sure that (1) they still fit the analyses you have chosen to undertake, and (2) you are incorporating the questions and theories you set out to test in your analyses and write-up. Often, the introduction will be completely rewritten once the analyses and results chapters are complete. It is likely that your argument subtly shifts focus over time, and your introduction should reflect this. One suggestion is to write down an outline or bulleted list of what the introduction and literature review say and read it every time you sit down to work on the results section. This will ensure that your thesis is a coherent work rather than disconnected chapters.

You should not incorporate your adviser's feedback blindly. If you do not understand why they are asking you to make the changes, you should ask them to explain it.

Part Six

Turning in the Thesis

Before you turn in the final draft of your thesis, PROOFREAD! You've put so much work into this product; don't undermine its value by failing to proofread. This does not mean simply running a spell check (though you should do this). You should leave yourself at least a full day or two at the end to proofread. Sometimes it is helpful to exchange theses with a friend and proofread one another's work—you have seen your own thesis so many times you are probably too close to the work to spot errors.

Formatting

For consistency and ease of presentation, the department requests:

Font and spacing: Times New Roman, 12 point font, double-spaced

Margins: 1 inch margins; 1.5 inches on the left for binding

Page numbers: Centered at the bottom of each page, starting with the first page of the introduction

Printing: Single-sided on acid-free paper

Binding: Both copies should be bound in a spring-hinged binder.

Theses Should Include (recommended order):

- A Title/Cover Page (see next page for example)
- An Abstract of around 250 words summarizing the thesis, including a brief statement of the topic, the method of research, and the findings.
- An acknowledgment page or pages is optional. Most people do include acknowledgements. If you have received any financial support for your research, such as a grant or fellowship, you should acknowledge that support. Do NOT bind the acknowledgment page with your thesis; submit two copies. They will later be inserted into the copy returned to you and the copy sent to the archives.
- A Table of Contents

General Formatting

- We recommend consulting the most recent edition of the American Sociological Association Style Guide, and following their formatting suggestions for headings, tables, etc.
- Footnotes should be used sparingly. If the information is important to your argument, put it in the text. If it is not important, consider omitting.
- Tables should be placed between paragraphs where relevant. We recommend dealing with table placement as the final step in the process—you can put them on separate pages too. It is never a good idea to break a table in half. It is better to place the table at a different point in the text so that it all appears on one page. You should refer your readers to specific tables and columns/models, so if your table is separated from its relevant text by half a page because of space issues, your reader sill still know what you are referring to.

Sample Cover Page

TITLE: NOT TOO LONG BUT NOT TOO SHORT EITHER

a thesis presented by

Student Full Name

to

The Harvard University Department of Sociology

in partial fulfillment for the degree of

Bachelor of Arts

with Honors in Sociology

Harvard College

Cambridge, Massachusetts

March XX, 20XX

DEADLINE: *Completed Thesis*
Tuesday before Spring Recess by 1 PM, Senior Year

Two copies of the completed thesis in standard black thesis binders are due in the Undergraduate Office on the Tuesday prior to Spring Recess by 1 PM. A late thesis will be marked down a half grade (e.g., from Magna plus to Magna, Cum to Cum minus, etc.) each day it is overdue, including weekends.

Eventually, you may pick up one copy of the thesis; the other copy will be placed on file in the university archives. You should plan to give an additional copy to your adviser. S/he will have worked at length with you on it and will want a copy to consult later and share with future students.

On occasion, we have had people call up on the afternoon of the due date to say their computer is down, the internet is down, their printer is broken, etc. These are not acceptable excuses for a late thesis. Allow time for mechanical and human failures. Don't leave the writing of your thesis to the last minute! Plan carefully for deadlines. Allow extra time for unexpected contingencies—itinerant professors, crashed computers, noisy roommates, etc.

Congratulations! Be proud of this major accomplishment and enjoy the Department of Sociology reception!

Before you turn in the final draft of your thesis, PROOFREAD! You've put so much work into this product; don't undermine its value by failing to proofread.

Grading

For information on grading, please visit "Senior Thesis Grading" on the department website.

Abbreviated Version of the ASA Style Guide

appendix one

References in the main text:

Include the last name of the author and the year of publication. In order to avoid plagiarism (inappropriately using another person's words without proper citation), you must directly quote verbatim, using quotation marks and the name, date, and page number in parentheses, or you must paraphrase and mention the source of the idea (name and date only).

Use page numbers only when you quote an author's words:

Sociological analysis of cities is “critical to achieving far-reaching social change in this century,” according to Duncan (1959:71).

If you include the author's name is in your text, follow the name with the year in parentheses:

According to Duncan (1959), sociological analysis of cities is critical to creating positive social change in America.

If the author's name is not in the text, enclose both the last name and year in parentheses:

Sociological analysis of cities is critical to creating social change (Duncan 1959).

For joint authors, use both last names:

(Martin and Bailey 1988)

For institutional authorship, supply minimum identification in the text and the complete citation under References:

(U.S. Bureau of the Census 1963:117)

Separate a series of references with a semicolon:

(Burgess 1968; Maxwell 1971)

If there is no date for a publication, use "n.d." in place of the year.

For unpublished materials, use “forthcoming” to indicate material scheduled for publication. For dissertations and unpublished papers, cite the date:

(Smith, forthcoming)

For works with three authors, list all last names in the first citation in the text; thereafter use “et al.” For more than three authors, use “et al.” throughout:

(Carr, Smith, and Jones 1962), then (Carr et al. 1962)

Block quotations are presented in smaller type and are set off in a separate, indented paragraph. They are not enclosed in quotation marks:

As stated by Wright and Jacobs (1994):

The variation in men's earnings relative to their peers in the labor force was not a reliable predictor of men's attrition. This finding is inconsistent with the prediction that declines in earnings are responsible for male flight from feminizing occupations. (P. 531).

Footnotes & Endnotes:

Endnotes are used to explain or amplify text, cite materials of limited availability, or append information presented in a table or figure. Number endnotes and list them at the end of your paper. Increasingly people use endnotes rather than footnotes and use either one sparingly as they tend to disrupt the flow of the text. Use footnotes and endnotes only when necessary. Footnotes appear at the bottom of the page in which they originate.

Miscellaneous Style & Grammar Matters:

Foreign words in your text should be italicized. Commonly used foreign words or terms, however, should appear in regular type. Examples are *per se*, *ad hoc*, and *et al.*

When using an acronym, spell out the complete term the first time you use it and present the acronym in parentheses:

First use: "The Current Population Survey (CPS) includes..."

Later: "CPS data show that..."

Equations in the text should be typed or printed. Use consecutive Arabic numerals in parentheses at the right margin to identify important equations. Align all expressions and clearly mark compound subscripts and superscripts.

Do not use abbreviations such as *etc.*, *e.g.*, or *i.e.* in your text. However, you may use these abbreviations in parenthetical information:

For example, some terms used in specific areas of sociology are not readily understood by the general sociologist (*e.g.*, cultural capital, *etc.*).

Cited References (Reference List):

List references in alphabetical order by authors' last names. References without an author name appear at the beginning of the list. For two or more references by the same author, list them in order of the year of publication. Use six hyphens and a period (----) in place of the name when the authorship is the same as in the preceding citation. To list two or more works by the same author from the same year, distinguish them by adding letters (a, b, c, etc.) to the year and list in alphabetical order by the title.

Sample formats:

Books:

Berlin, Gorden and Andrew Sum. 1988. *Toward a More Perfect Union: Basic Skills, Poor Families, and Our Economic Future*. New York: Ford Foundation.

Mason, Karen O. 1974. *Women's Labor Force Participation and Fertility*. Research Triangle Park, NC: National Institutes of Health.

U.S. Bureau of the Census. 1960. *Characteristics of Population*. Vol. 1. Washington, DC:

U.S. Government Printing Office.

Journal Articles:

Conger, Rand D. Forthcoming. "The Effects of Positive Feedback on Direction and Amount of Verbalization in a Social Setting." *Sociological Perspectives*.

Goodman, Leo A. 1947a. "Exploratory Latent Structure Analysis Using Both Identifiable and Unidentifiable Models." *Biometrika* 34:215-31.

-----, 1947b. "Systems in Qualitative Variables When Some of the Variables Are Unobservable, Part I – A Modified Latent Structure Approach." *American Journal of Sociology* 79:1179-1259.

In most cases, journal pages are numbered consecutively within a volume year. Therefore you can often omit the issue number. Include the issue number or month only when it is needed to distinguish one issue from another within a volume year.

Articles from Collected Works/Chapters in Books:

Clausen, John A. 1972. "The Life Course of Individuals." Pp. 457-514 in *Aging and Society*, vol. 3, *A Sociology of Age Stratification*, edited by M. W. Riley, M. Johnson, and A. Foner. New York: Russell Sage.

Unpublished Manuscripts:

Osterman, Paul. 1990. "Welfare Participation in a Full Employment Economy: The Impact of Family Structure and Neighborhood." Massachusetts Institute of Technology, Cambridge, MA. Unpublished manuscript.

Mechanics:

Page Numbering: Page numbers should be centered at the bottom of each page (starting with the first page of the introduction). Carry the numbers system through endnotes and references.

Tables: Number consecutively throughout the text. Place tables at the end of the paper, but refer to them in the text by number. Each table includes a descriptive title and headings for both columns and rows.

Figures and Other Artwork: Number consecutively throughout the text. Place figures at the end of the paper, but refer to them in the text by number. Each figure must have a descriptive title and appropriate headings.

For more information, check out these references:

American Sociological Association. 2007. *American Sociological Association Style Guide*. 3rd ed. Washington, DC: American Sociological Association.

Becker, Howard S. 2007. *Writing for Social Scientists*. 2nd ed. Chicago, IL: University of Chicago Press.

Krenzin, Joan and James Kanan. 1997. *Handbook of the Mechanics of Paper, Thesis, and Dissertation Preparation*. 2nd ed. Washington, DC: American Sociological Association.

The Sociology Writing Group. 2007. *A Guide to Writing Sociology Papers*. 6th ed. New York: Worth Publishers.

Funding Sources for Thesis Writers

appendix two

Start thinking about your funding needs during the spring of your junior year. What research expenses are you facing? Commonly, students seek funding for travel costs, interview transcription costs, compensation for interview subjects, or fees for data access.

Grant applications for senior thesis research are typically due throughout the spring semester of your junior year. You may be thinking that your research topic is too undefined to apply for grants, but this is not the case! Of course a strong application is as specific as possible, but grant committees for funds for this purpose understand that your topic will change between the grant proposal submission stage and the research stage of your project. Writing grant applications as you develop your topic is also a useful way to help you narrow down your research question.

Your adviser is a good resource for advice on writing a strong grant proposal. Provide your adviser with a description of the grant and your application materials (including a statement of what your project is about) two to three weeks prior to the deadline to allow them to give you feedback. If you need a letter of recommendation, make this request no later than two weeks before the grant is due.

The Office of Career Services website has a large database of available research grants. Please visit <http://funding.fas.harvard.edu>.

For a list of grants that might be a good fit for senior thesis writers in the Department of Sociology, please reference the Funding Sources document available on the department website.

Harvard's Centralized Application Research and Travel (CARAT) tool may be found at <https://asperin.fas.harvard.edu/carat/>.

End Matter

This guide was prepared by Ann Owens (Graduate Student in Sociology and Social Policy) with the assistance of David Ager (Lecturer on Sociology and Director of Undergraduate Studies), Jason Beckfield (Assistant Professor of Sociology and Director of Undergraduate Studies), and Kevin Lewis (Graduate Student in Sociology). Updates were prepared by Laura Thomas (Undergraduate Advising and Program Administrator) and Rachel Meyer (Lecturer on Sociology and Assistant Director of Undergraduate Studies). Administrative oversight was provided by Nancy Branco and Dotty Lukas in the Department of Sociology. Cover art was designed by Genevieve Butler.

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end matter

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