Book Reading Summary: Where Research Begins: choosing a research topic that matters to you (and the world)

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Contents

1 Summary

1.1 Research Phases: Inside-Out Self-Centered Approach

Where Research Begins: choosing a research topic that matters to you (and the world), Thomas S. Mullaney and Christopher Rea, The University of Chicago Press.

- In this book, the authors proposed the ***Self-Centered Research*** process, an inside-out self-motivated research ***practice***, ***ethic*** and ***a state of mind***. It discuss, at *the beginning phase of research*, how the research problem is *identified*, *refined* and *evaluated*, through ***inward-focus*** *first* and ***outward-focus*** later methodology.
- This book focus on ***raising the internal motivations*** of researcher before the research process started, and in the process to gain *self-awareness*, *self-trust* and *affirmation on the direction of research* on their own. It stress the importance of "***finding your center***" – the matters that really motivates *you* to start the research. It focus on the question of "*Why?*"
- By using "***introversion first, extroversion second***" approach, the authors help the early researchers to ***avoid*** being ***distracted*** by perspectives, ideas, suggestions from ***others*** *(authorities, mentors, colleagues)* in research communities, as well as to *avoid* ***the judgemental thoughts*** from ***their own mind***, which could hurt the inner exploration processing at early stage of research.
- This book has a favor of using ***psychological*** *treatement* to examine the researcher's own interest/boredom on research questions.
- The key messages to early researchers:
  1. Be ***vulnerable***
  2. ***Listening to yourself***
  3. ***Writing things down***
- This book is divided into two stages:
  - ***inward stage***: the ***goal*** of this stage is the ***raise*** *the* ***self-awareness*** of the researcher ourselves on our motivations and values. This way to make sure we are confident on our direction and priorites. This stage is also the stage we accumulate knowledge, source materials and raise our arguments.

    In this stage, we transform

    * from **topics** into **questions**: including *question brainstorming*, *interest self-observation*, *boredom self-observation*, and *question narrow-down and specification.*
    * from **questions** into **problems**: including *question linguistic check*, *question source check*, *question expansion*, *assumption uncover and modification*, and *problem identification.*
    * we **engage sources** and **assemble our arguments**.
    * finally, we **plan** our project and write our **research proposal**.
  - ***outward stage***: the goal of this stage is to ***raise awareness*** on the *external* ideas and perspectives in your ***field*** and your ***Problem Collectives***, and to make most out

of this ***relationship***.

Part 2 moves your research journey into a *broader* and deeper ***engagement*** with other people's ideas. This stage focus on ***engaging*** with external world and their perspectives, ideas, esp. with your *field* and your Problem Collectives.

We are also going to revise our draft based on their feedbacks for multiple rounds.

The goal of outward stage is to *build connections* with our fellow researchers and to *publish work* that matters not only to ourselves but also to the community we belonged to.

- This book mainly covers the research phases in ***History, Philosophy, Literature and Arts***. What about the research in ***Science, Engineering and Math***?
  - The researches in *STEM* also follow a similar phase: *from topic to question, from question to problem, from problem to sources, and then assembling arguments, writting proposals, writting drafts with reviews and revisions.*
  - However, the research activities in STEM focus on ***logical deductions***, ***experiments*** *and* ***data analysis***, while researches in literature, hiotory and arts focus on *interviews, archaeology discovery, literature reviews, art creation* etc.
  - The ***primary sources*** for STEM are also different.

    In science and technology, the primary sources are mainly ***experimental data/database***, ***original codes***, ***experiment notes*** *and the* ***environment*** *and* ***equipments*** *for the experiments.*

    In math, the primary sources are mainly *the* ***definitions***, ***examples***, ***previous proved related results*** *(definitions, lemmas, theorems, proofs, applications), as well as* ***the deduction logics*** *for argument.*
  - The authors mention that after initial brainstorming, we need to ***stress-testing*** *our question* using sources.

    For STEM, the stress-testing procedure not only involves ***searching and reading literature*** (secondary sources) but also involves ***conducting initial data analysis and proof-of-concept experiments*** *(primary sources).* In this early phase, we should not focus on answering our questions, but instead focusing on the ***develop, refind and expand our questions***.
  - In ***the primary source engagement*** phase, the authors discussed about how to *use/expand keyword search* on digital databases, and how to *refine our questions* based on search results. The author also mentions that we need to envision the best primary sources to expand our search.

    Both these methods can be used in STEM but not sufficient. For STEM, the primary sources are collected by the reseachers themselves first hand through ***experiments*** *and* ***data analysis***. ***Searching literature*** is still needed but would not be enough.
  - The *experiment* and *data collection* phase is the most resource-consuming phase of the research. The authors suggest to take ***notes*** on the ***features (disaggregated components)*** *of the primary sources*, ***the questions*** *we may have at specific feature*, *the very*

next primary sources *(experiments, databases etc.)* as well as ***a broader genres of questions*** *that may be related to the same source.*

Envisioning the primary sources means to imagine ***the ideal experiment*** *and/or* ***ideal database*** that related to the research. This is a useful advice.

1.2 Summary of Chapters

This books covers several phases of early research:

1. ***Question Brainstorming with Self-Observation***: at this earliest phase, the task is to generate questions relevant to you, ***from the best of your knowledge***.
   - This part covers the traditional method of "***from topics to questions***". But in this book, the emphasis is on self-observing on your own reactions to specific matters in the topic and your own perspective and related questions.
   - While scanning through entities under a topic, ask yourself "*Why does that interest you?*" or "*Why i do not care about it?*" ***Take notes*** on questions generated and *flag* those with unconsciously effect (interest/bordom) on you.
   - The point is being ***honest***, ***self-observing*** but not ***not be judgemental***.
   - Your questions are for yourself. They are meant to be ***unpolished***. Use normal worlds, not jargons. You are not meant to impress anyone.
   - *Your questions* need to be ***specific and concrete***, *not vague*, not *abstracting*.
2. ***Question Refinement***: In this step we ***improve the questions*** you have already generated. There are two ways for stress-testing your questions:
   - Focus on ***language***; By the end of this process, your questions should meet these criteria:
     - ***They should be clear, precise, and jargon-free***.
     - They should be ***rooted in verifiable and falsifiable data***. Your research questions should have **integrity**. This means that they should be inspired by **fact**, rather than by speculation, prejudice, or opinion.
     - They should be ***indifferent to the outcome***. A research question *should not presume a certain answer*. If yours does, rewrite it to *eliminate that presumption*.
     - They should be ***clear*** *about the* ***subject***. Be as specific as you can be about the *who* in your question.
     - They should be ***raw*** and ***undisciplined***. At least for now.
   - Focus on ***sources***. Rather than trying to use primary sources to start answering the questions you've come up with, we want you to use them to *develop*, *refine*, and *expand those questions*.
     - ***Refine*** and ***Expand*** your ***keyword*** used for searching the primary sources. Pay close attentions to new keywords in titles, abstract, index, introduction, conclusion. Keep track of all keywords, the primary sources and searches found during the process.

- Reveal the hidden ***assumption*** behind these questions. Also for assumptions that are bias, do not discard them directly; instead modify them and improve them. Keep a note on all of assumptions discovered and then treat them accordingly based on your evaluation and your intent.

  During this categorization process, write down your thoughts and reasons for the categorization.

3. ***Problem Identification***: This is the part where we move "***from questions to problems***". At this step, we use *sources* to *identify the problem* by understanding ***internal connections*** between questions. We also learn how to use our *Problem* to *generate new and better questions*.

   - In particular, we need to ***generalize*** from previous questions to higher level.

     Also we need to ***group*** these questions and to identify ***the shared concerns*** among these questions.

   - Note that it is not time to answer these questions.

   - How do I know when I've truly discovered my Problem?

     A problem is never a fleeting thing. Rather, it is something that is ***sustained*** and ***enduring***.

4. ***Primary Source Engagement***: We need to identify, filter and refine your list of primary sources ***based on the identifed problems***. ***Reversely***, we also need to ***milk our sources*** to generate ***a genre of new related questions*** to the same problem. We will connect to different projects and then connect with different sources.

   - You need to distinguish primary and secondary sources.

     Primary Sources are the ***evidence*** that you use to ***develop and test claims***, ***hypotheses***, and ***theories about reality***.

   - Note that a source's *type* is determined solely by ***its relationship with the questions*** you are trying to answer, and *the problem* you are trying to solve. A source is never inherently primary or secondary.

   - ***how you treat this source*** will lead you down either a narrow path or a broad avenue of potential research questions. We can

     - jump to obvious candidates: direct questions related to the source or the elements of the source; or
     - think about ***different projects*** that might include this source;
     - think about ***other primary sources***.

     We can name *the genre of questions* and considering them connected to an underlying problem.

   - You need to deep dive and discover the full potential of these primary sources. This helps you to look beyond obvious questions and to arrive at something original.

   - ***Envision*** *imaginative primary sources* that best answer your question. Search for it.

- You need to pinpoint these sources to your problem; determine if they are relevant, reduandent, reliable.

5. ***Argument Construction***: We need to make proper argument from these sources. Before, we need to *prepare enough primary sources* to make a good argument.
   - In particular, we need to
     (a) Find the dots.
     (b) Figure out which dots *belong to your picture*, and which dots belong to some other picture.
     (c) Figure out which dots are not dots at all. *Not all materials can be used as sources.*
     (d) *Do all of the above in real time.* Do not expect linear progression.
     (e) Determine when you have enough.
   - Be aware of the ***ethical*** *issues* on how to use the source materials. Be honest for what you see and what you don't see. Not forcing a story. Represent the source accurately.
   - Source has its own agency so treat them with *critical mindset.* Even if the sources contain flaws, you can still use them in question-generation process to clarify your assumptions and problems.
6. ***Research Project Design and Initial Propsal Drafting***: We need to write a ***research project proposal before*** our research is ready.
   - Note that *we cannot fully prepared to start* a research but *we should get started* (***bias-for-action***.)
   - This research project proposal is ***for ourselves only*** and it provides a written record for our ***envisioning*** at the *raw, premature state.*
   - The format of a research proposal includes:
     – ***Contextual framework***.
     – ***Goals and objectives***.
     – ***Significance***.
     – ***Project plan***, including the ***detailed methodology*** and a ***logistical plan***, including your timeline and list of project milestones.
   - We can show it to our mentors and ask for advices. Then we can revise them accordingly.
7. ***Problem Collective Identification***: After we have finished our research project design and proposal, we need to move *beyond ourselves* and to ***translate*** our work to ***external audiences***. Before we start the translation and revision of our draft, we need to know ***who our audiences are***. This part address the tasks of identifying our main audience, those who shared the same interest as we do on the problem. These people are called *Problem Collectives* in this book.
   - The ***main*** *discussion point* in this chapter is to still ***discovery the essence (non-negotiable part) of our own problem*** by removing the redundant components that

may not interest us. This way we also ***expand our problem*** to a broader scope.

This way makes us easier to discover people who interest in similar problems as we did in a broader scope.

- Two approaches are introduced to expand our problem scope:
  - The "Change One Variable" approach decompose our problem into a set of variables, and make a variation of our problem with changing one variable. This allows us to understand the part of our problem that is non-negotiable, which is the key to our problem. It also allows us to expand our search by changing the other negotiable part of our problem.
  - The "Before and After" approach allows us to envision our work be part of a flow of works, with predecessors and successors's work. Understand the flow of ideas before us and after us helps us to understand our problem in a development perspective.
- This chapter also provides a practice of ***expanding the searching scope*** *of Problem Collective* using secondary sources such as publications.
- The most important message in this chapter is to understand that ***not all of variables of our problem is non-negotiable***. We can always change some part of our problem without altering our interest on them.
- The key to identify *a member of Problem Collective* is to understand ***if their problems are also your problem***, up to some change of variable practice, and *if their works have* ***impact*** *on you*.
- The stage of *Problem Collective identification* may be interwined with *the* ***Problem Identification*** *stage* as well as *the* ***Source Engagement*** *stage*.

8. ***Rewriting for Problem Collective***: After we identify the Problem Collective, we need to ***rewrite our proposal*** for our Problem Collective.
   - The main work in this part is to ***identify and remove field's jargons***. Our familar concepts and keywords may not be understood by outsiders, who may be in our Problem Collective.
   - These jargons include *terms, individual, organization, nouns, adjectives/adverbs, acronyms, abbriviations etc*.
   - The rewriting practice has a lot of benefits:
     - It helps us to ***keep the problem front and center***. By focusing on the essence problem, It should drive the flow of your prose, the structure of your argument, and the words you use.
     - It helps us to ***step out of our Field's echo chamber***. By removing field's code words, we would help the outsiders to understand our questions and, more importantly, to *identify us as a part of the same Problem Collective*.

       The early phases of research benefit from ***slowing down*** *and* ***decompressing language***.
   - We are likely going to have to *write for your Collective in ways that your Field doesn't*

demand of you.

They may not be impressed by the same topics as our Field. Also we need to note that our Problem Collectives may not have same default inhibitions.

- We need to be aware that *our Problem Collectives may* ***not share the same solution*** *as us.*

9. ***Field Grouping via Problem Collectives***:
10. ***Rewriting for Field***:
11. ***Assembling into Draft***:

2 Try This Now

2.1 From Topics to Questions

- **Exercise 2.1 (Search Yourself)** *The **goal**: To use a list of **primary-source search results** to figure out **the aspects of your topic** that **most interest you**, and **draft questions** based on these interests.*

  You already know how to search the internet. This exercise prompts you to use the results of an internet search to search yourself.

  *This exercise offers one way to **get from a topic to questions***

  1. *Based on the "Try This Now" exercise you completed in the introduction, **write down any and all of the research topics you are drawn to**. Feel free to be as general as possible, and to include more than one.*
  2. ***Select** one of the topics on your list and run a search using at least three (or more) of the webbased databases listed below.*
  3. *Click on a few of the **search** results that **interest** you – say, five to ten.*
  4. *Don't read the search results in depth. Instead, your goal is to dedicate*
     - *perhaps 20 percent of your mental energy to **scanning** the list of search results (and perhaps the contents of a few) and*
     - *the remaining 80 percent of your mental energy to **self-observation**.*

     *You want to **read yourself** as you **read the results**.*
  5. *In particular, pay close attention to how your **mind** and **body** are **responding** to different search results:*
     - *Which ones seem to **jump out at you**?*
     - *Which ones cause you to **linger** just a split second longer?*
     - *Which ones quicken your **pulse**, even slightly?*
  6. ***Write** down at least ten entries that **attract** you, without worrying about why they do.*
  7. *Based on this list of ten entries, **answer** the three questions above about those entries, to **generate self-evidence**.*
  8. *Sleep on it (take a break of at least twenty-four hours).*
  9. *Return to the answers you wrote out and ask yourself: If I didn't know the person who wrote these answers, or* flagged *these search results as* "interesting,"

     what kinds of guesses would I make about this researcher?

     What story does this "self-evidence" seem to tell about the researcher, in terms of their concerns and interests?
  10. ***Write** down your **thoughts** on these questions, getting as much down on paper as possible.*

Common **Mistakes**:

- Not writing things down
- Getting bogged down in **individual sources too soon**
- Excluding "fluke" search results that **seem unrelated** to the keywords you entered in the database or unrelated to your topic
- Feigning interest in a search result that seems "**important**," even if it doesn't really interest you
- Only registering interest in search results for which **you think you know why** you're interested in them, instead of being more **inclusive**
- Trying to make a list of noticings that is **coherent** and fits together
- When speculating about why a search result jumped out at you, worrying about whether or not the reason is "**important**," based on some **imagined external standard**

- **Exercise 2.2 (Let Boredom Be Your Guide)** *The **goal**: To become **attentive** to your **active dislikes**, identifying questions that you "should" (in theory) be interested in based on your topic of interest, but aren't. By **understanding what you don't care about** regarding your topic, you accelerate the process of figuring out what you do care about.*

  *After all, the most common reaction human beings have to **boredom** is **avoidance**. We try to dismiss or ignore things that bore us.*

  But how would you explain why something bores you – especially something that seems like it should align with your topic of interest? Here's what to do:

  1. *Go back to your search results, and scan them again.*
  2. *Pay close attention to your EKG readout, focusing this time on the results that **bore** you.*

     In the very same way that we spoke of not "outsmarting" yourself regarding your interests, you will need to be cautious during this process as well.
  3. *Choose a few "**boring**" results and **write** down answers to the same questions you answered before – this time for these different, boring search results:*
     - *What does this make me think of?*
     - *If I had to venture a guess, why did this one **not jump out at me**?*
     - *What **questions** come to mind for me when I look at this search result?*
  4. *Now, for each search result, write some version of this sentence: "I'm **more interested in** [something else] **than** [search result]."*

  Common **Mistakes**:

  - Denying boredom, or feigning interest in something because you feel it's "on topic" and demands your interest because it's "important."

- Engaging in circular logic.

- **Exercise 2.3 (Go Small or Go Home)** *The **goal**: To generate **specific, fact-focused questions** about your topic before you've done in-depth research. These will lead to bigger questions later on.*

  You have a set of notes about two things:

  - *What you noticed about sources on a topic, and your best guesses as to why you noticed those things*
  - *What, among the "logical" or "obvious" aspects of your proposed topic, bored you and why*

  Using all of this as inspiration, try the following – as always, in writing.

  1. *In a stream of consciousness, **write** out a minimum of **twenty questions** related to your topic.*

     *The **key** is to make your questions as **specific** as possible, using the following prompts:*

     - *What facts do you **wish to know** about your topic?*
     - *Which **data** or **information** about your topic might you need to satisfy your curiosity?*
     - *What telling **details** about your topic do you **imagine** might exist?*

  *Asking **precise factual questions** is one **key** to **escaping Topic Land**.*

  Common **Mistakes**:

  - Asking vague, grand, abstract, or big-picture questions about "meaning" or "significance," instead of specific and **precise factual questions**
  - Not asking actual questions (with a question mark), but instead writing statements or sentence fragments – **topics masquerading as questions**
  - Not asking a question because **you think you couldn't answer it**, perhaps because you think that the data doesn't exist or is unattainable
  - Asking **too few questions**, resulting in an inadequate quantity of self-evidence

2.2 From Questions to Problems

- **Exercise 2.4 (Run a Diagnostic Test on Your Questions)** *The **goal**: To ensure that the vocabulary, grammar, and phrasing of your questions are **specific** and **unprejudiced** so that they do not presume a certain outcome.*

  Rewrite your research questions with particular attention to the following:

  1. ***Punctuation**. Do your questions actually end in a question mark? Or have you phrased them in more general, and vaguer term? **Be more specific**, and add a question mark.*
  2. ***Adjectives and adverbs**. Do your questions rely on **broad**, **generic**, **imprecise**, or*

sweeping *adjectives? Try to cut such adjectives and adverbs out entirely.*

3. ***Collective nouns.*** *Do your questions depend upon collective nouns? If so, do your best to replace these nouns with more precise categories. You do not need to take into account all possible variables, but you do want to try to include all of those that might make a difference to your project.*

4. ***Verbs****. Do your questions contain verbs like "influence," "affect," "shape," or "impact" or passive constructions such as "was affected by," "responded to," or "reacted to"? In such cases, chances are high that you are building your questions in such a way that they* ***rule out*** *an entire set of* ***possible*** *answers and outcomes.* ***Rephrase to avoid presumptions*** *that could result in confirmation bias.*

Common **Mistakes**:

- Asking ***leading questions***, which are phrased so as to *predetermine the answer.*

  These questions are motivated by *unproven assumptions*, andr result in ***confirmation bias***. The result of leading questions is that you inevitably find what you are looking for.

- Asking ***advocacy questions***, which promote a certain ideology (taken-for-granted world-view) or course of action.

  These questions ***take a position*** and encourage others to *adopt* it, irrespective of the actual facts of the case or which interpretations the evidence suggests are plausible.

- ***Forcing*** all your questions to "make sense" or "add up." Don't worry. That part will come soon.

- **Exercise 2.5 (Use Primary Sources to Educate Your Questions)** *The* ***goal****: To learn how to* ***run keyword searches*** *designed to* ***enhance*** *or "educate" the* ***questions*** *you are asking about your topic.*

  These searches ***uncover primary sources*** *relevant to your research that themselves contain* ***new keywords*** *you were previously unaware of (thereby enabling you to run follow-up searches to reveal even more, and more useful, primary sources).*

  This next exercise requires you to delve back into your ***specific subject matter*** *and into* ***primary sources****. Rather than trying to use primary sources to start answering the questions you've come up with, we want you to use them to* ***develop****,* ***refine****, and* ***expand those questions****.*

  Here are some ***techniques*** *to help you use primary sources to refine your keyword searches.*

  - ***Take Advantage of Category Searches****. In certain databases, you might be fortunate to come across materials that are accompanied by* ***metadata*** *(data about data), crafted by librarians and archivists whose goal it is to make sources more discoverable to researchers like you.*

    This is one way to get from a source that contains only the keywords you used in your search to another source that contains none of the keywords you used. Here's what to do:

    - *after you run your search, and receive your results, **sort** the results chronologically*
    - *As you scan through these **titles**, take notice: What words show up in the title?*
    - *If you are able to read the work online, scan the **table of contents**, the **preface**, the **introduction**, and the **index**. What words, terms, and vocabulary are used? These are your new keywords. Write them down.*

  - ***Locate Self-Reflexive Sources**. In some cases, you might be fortunate to find a primary source, like a historical dictionary, that explicitly addresses the shifting nomenclature surrounding the very topic the primary source is about, outlining for you the varied ways a given idea, place, community, practice, or the like has been named and renamed across time and space.*

    *The goal for now is to determine if this source will lead you in the **direction of further primary sources** that you wouldn't have been able to find otherwise.*

  - ***Keep Track of Your Keywords and Searches**. As you discover and try out more and more keywords – and even a smaller-scale project can produce hundreds – it's easy to lose track of them and get overwhelmed.*

    *Fortunately, there's a simple solution: **track** your searches using a **table**. Here's how, in three steps:*

    - *In the rows on the left side, enter the **keywords** you plan to use.*
    - *In the column headers, enter all of the electronic **databases** or library catalogues you plan to explore.*
    - *Inside each cell, keep track of when you ran a particular search. Enter the **date of your search**, and perhaps also a brief **note** on the number of results you found.*

- **Exercise 2.6 (Make Your Assumptions Visible)** *The **goal**: To become aware of the **assumptions** you bring to your research project and use them to identify the **problem** that motivates your research questions.*

  So let's get to work on making your assumptions visible, and vulnerable. Here's what to do:

  1. ***Review** your most recent set of **questions** and ask yourself:*

     For each of these questions, what has to be true in advance in order for me to ask this question in the first place?

  2. *List the small questions/things you **noticed**, and **write down the assumptions** you may hold that helped you notice each in the first place.*

  3. ***Make a list of the assumptions** you bring to **this particular question**, and sort them into the following categories:*

     *(a) Assumptions you **want to** work with, for now*

     *(b) Assumptions you want to **discard right away***

     *(c) Assumptions you are **unsure** or ambivalent about*

4. *Write two lines to **justify your choice** for putting each assumption in a particular category.*

5. *Now go back to all of the questions in your list whose underlying assumptions fall into **category (a)**.*

   *Since these are built on assumptions that you, having reflected on them, feel safe in **maintaining**, then these questions are good as they are.*

6. *What about questions whose underlying assumptions fall into **category (b)**? Although you might be tempted to, do not throw them away just yet! If you find them to be based on weak, prejudicial, or unfounded assumptions, **try to rephrase them** so that they aren't.*

   *Can they be **rebuilt** as more **grounded**, **open-ended questions**?*

   *Try to **improve** them before you **discard** them.*

7. *As for questions built on **category (c)** assumptions, these fall somewhere in between. Most likely you would want to **keep** them in your list, but perhaps **flag** them, as reminders to yourself that you want to keep an eye on them, and revisit them as your research deepens.*

*To keep things organized, try **creating a chart** like the one in table 3 for each question, in which you identify and analyze underlying assumptions and revise the question as needed.*

Common **Mistakes**:

- *Not identifying or divulging the assumptions motivating your research questions* – for any reason, including embarrassment or self-consciousness.
- *Not attempting to **revise or restructure** a research question based on **category (b) assumptions**.*
- ***Dismissing** or throwing out **category (c) assumptions***, instead of **examining** them as a type of self-evidence.

- **Exercise 2.7 (Identify the Problem That Connects Your Questions)** *The **goal**: To **identify the problem** underlying your multiple draft research questions*

  Try this procedure:

  1. *Lay all of your questions out in front of you.*
  2. *Do not try to answer all those questions for now. Instead, ask yourself:*

     *What are **the shared concerns** that connect these **questions**?*

  3. ***Step outside yourself**. If you were **someone else** looking at these questions,*

     *what might you speculate are the **deeper questions** that **connect** these **small questions**?*

  4. ***Write down those questions**.*

5. *If necessary,* ***prioritize*** *your questions by degree of* ***specificity*** *or* ***generality****, as* ***medium-level*** *or* ***high-level*** *questions.*

   These questions should be ***more general*** *than the* ***specific factual questions*** *you generated earlier.*

Common **Mistakes**:

- ***Trying to answer your multiple questions***, instead of focusing on ***identifying the shared concern*** that underlies them.
- Not thinking ***beyond the particular topic or case***, and ignoring a ***more fundamental concern***.

2.3 Engaging Primary Sources

- **Exercise 2.8 (Treat Your Primary Source Like a Cereal Box)** *The* ***goal****: To adopt the habit of* ***asking multiple genres of questions*** *about each of your* ***primary sources*** *so as to* ***identify problems that are not self-evident*** *and thus might easily be* ***overlooked****.*

  This technique will both enable you to decide which problem interests you most, and enhance your ability to conduct original research.

  1. *Using the search techniques you learned in chapters 1 and 2, track down and obtain a single source.*

     it should be a source that you instinctively feel must be "primary" with regard to your emerging research concerns.

  2. *Create a table (namely table 5 in the book) with 4 columns:*

     (a) ***What I notice*** *about the source*

     (b) ***Questions****/concerns I might have*

     (c) *The very* ***next primary source*** *I might* ***want*** *to find*

     (d) ***Broader*** *subjects and/or genres of* ***questions*** *that might be* ***related to my problem***

  3. *Using table 5 as your guide, take notice of as* ***many different features*** *of your* ***source*** *as possible.*

     - ***Disaggregate*** *the source into its different* ***elements****.*
     - ***Identify*** *as many elements as possible, but no fewer than ten.*
     - *You will need to abstract and extrapolate from observations.*
     - *Fill in first column.*

  4. *As you fill in the first column, try to imagine the kinds of* ***questions*** *that could be asked by* ***focusing*** *on one or another* ***specific feature*** *of your source. Think expansively. Add these questions to column 2.*

  5. *Now imagine what a potential "****very next source****" might be for each of these feature-question pairings, and fill in column 3.*

6. *Finally, return to your increasingly skilled faculties of introspection, asking yourself:*
   - *Which of these feature-question-source lights my fire?*
   - *Which excites me the most? Why, if I had to venture a guess?*
   - *Which of these bore me? Why, if I had to venture a guess?*
   - *What does this suggest about what my primary concerns might be?*
   - *How is this source "primary" with respect to my questions and concerns?*

   Write them down.

Common **Mistakes**:

- Asking only *obvious* or *self-evident questions* related to the ostensible topic of the source, instead of ***multiple genres of questions***
- Asking questions that are vague and general instead of ***specific*** *and* ***factual***
- *Asking* ***too few genres of questions*** – aim for at least ten. Err on the side of being creative, even far-fetched
- For "*the very next primary source I might want to find*," *thinking only of sources* ***within your Field***
- After completing the table of noticings, questions, next sources, and genres of questions, *skipping the steps of (a)* ***gauging your relative interest*** *in those results, and (b)* ***writing*** *down the result.*

- **Exercise 2.9 (Envision Your Primary Sources)** *The* ***goal****: To identify places you might not have originally considered looking for primary sources. This will* ***enhance the comprehensiveness***, ***originality***, *and* ***significance*** *of your research.*

  The steps for this exercise are straightforward:

  1. *Write down your* ***research questions****, as always, with as much precision as you can.*
  2. ***Brainstorm****: What sources* ***might exist*** *that would be primary with respect to my research questions?*
  3. *Write down as many* ***types*** *of sources as possible.*
  4. ***Optional****: If you have time to spare, and as long as it doesn't distract you from steps 1 through 3, try to* ***find*** *such sources. If you find any of them, put them through the Cereal Box Challenge.*

  Common **Mistakes**:

  - During brainstorming, thinking only in terms of your *specific case* and not in terms of *the general categories or institutional structures* in which the world might have arranged sources related to your case
  - *Excluding* sources because they *do not appear to be related to your topic or keywords*

- *Worrying* about whether or not you can *actually obtain* the sources you envision
- *Not writing things down*

2.4 Assembling Arguments

- **Exercise 2.10 (Connect the Dots Using Your Sources)** *The **goal**: To start thinking about source criticism early in the research process, while remaining flexible and inclusive.*

  The steps are simple:

  1. *Identify my **primary sources**. Draw on what you wrote down for the "Envision Your Primary Sources" exercise.*
  2. *Determine which **primary sources belong to my problem**, and which to someone else's.*

     Be as honest as possible about the problem that motivates you.
  3. *Determine which of the things I have are **actually (primary) sources**.*
  4. *Find the best way to form a **narrative** by arranging the primary sources.*

     *Trying out some narrative possibilities by **structuring** and **ordering** your sources in different **configurations**, to see how they speak to one another.*

     The key, of course, is not to force any pieces of the puzzle together.
  5. *Determine when **how many** primary sources will I **need** to answer my questions, solve my Problem, and complete my project.*

     *This is a question that only **you** can answer, although your Sounding Board might be able to help you make this assessment.*

  Common **Mistakes**:

  - Thinking that you ***have to have all*** your sources in hand *before you start this process.* You will need to have multiple sources (dots) to begin this process, *but not all.*
  - Writing in *pen* rather than *pencil.*

    Recognize that the connections you make between sources right now are necessarily ***tentative*** *and* ***speculative***.

    Expect that you will have to ***reassess your judgments later on***, and don't think that you have to "stick to" your original thought.

2.5 Planning Research Projects

- **Exercise 2.11 (Decision Matrix)** *The **goal**: To envision which factors will likely have the greatest impact, positive or negative, on the success of your research project, and to adjust your plan accordingly.*

  Use the following factors

  - **Time**.

- **Funding**.
- **Writing speed**.
- **Family responsibilities**.
- **Access**.
- **Risk tolerance**.
- **Abilities**.
- **Human subjects**.
- **Personality**.

The above lists several material factors. follow these steps:

1. *Create an **inventory** of all of the **factors** that could **impact the success** of your project as you currently imagine it. Aim for a list of ten to fifteen factors.*
2. ***Categorize** each factor as **positive** or **negative**.*
3. ***Categorize** each factor as **high-** , **medium-** , or **low-impact**, depending on the degree to which you believe it will affect your project.*
4. *Write it down in a table and adjust your research questions accordingly.*

Common **Mistakes**:

- ***Underestimating*** the ***amount of time*** it will take to complete the project.
- Listing only "*professional*" factors and failing to include ***personal factors*** that might have a real effect on your research progress.
- Neglecting to consider ***ethical factors*** such as the effects of human-subject research on participants

- **Exercise 2.12 (Prepare a Formal Research Proposal)** *The **goal**: To catalyze all of the "potential energy"" you've been building up thus far, by giving it a sudden, unexpected jolt—namely, by writing a **formal**, **forward-looking prospectus** about your project-in-the-making, where you try to persuade someone to support your work.*

  *This research prospectus will also bring into even **sharper focus** your **assumptions** right now about what other people might find compelling about your study. This is definitely going to feel **premature**, but trust us: it's still part of the process.*

  *For this exercise, you're going to take the self-dialogue you've been having and turn it **outward**, **explaining** your project to an **imaginary reader** in as coherent and **persuasive** a manner as you can at this point. And you're going to do it all **before you're ready.***

  *The polish will come later. For now, what you need most of all is to articulate, **in written form**, **your earliest thoughts on a subject**. **Your agenda**. So try this:*

  1. *Prepare a research grant **proposal** in which you articulate a research **question** and **argue** that someone should give you money to answer it.*

*Force yourself to be **clear** and **concise** by writing a formal document, within tight **constraints**:*

- *4–6 double-spaced pages*
- *1-inch margins*
- *Times New Roman, 12-point font*
- *Due in one week (to be submitted to yourself only!)*

The research proposal should contain the following four parts

- ***Contextual framework**. You need to equip your reader by explaining (succinctly but thoroughly) the essential knowledge and frames of **reference** that they will need to understand the facts of your proposed research and appreciate its potential significance.*
- ***Goals and objectives**. State the questions you propose to answer using primary source archival materials.*
- ***Significance**. Based on your current understanding of your chosen area of analysis, explain the **significance** of your proposed questions.*

  the significance of your proposal must reside in a well-articulated, meaningful, and open-ended problem that you have arrived at through primary source– based (and secondary source–based) research.
- ***Project plan**. Provide a **detailed methodology** that will enable you to achieve your project goals. Provide a **logistical plan**, including your timeline and list of project milestones.*

Common **Mistakes**:

- Avoiding writing this draft by using one of the oldest procrastination tricks in the book: "*I just need to do a little bit more research.*"

  Save that for later. For now, however, ***think and write from where you are*** at this moment.
- ***Writing defensively**.* Anticipate things that your reader might ask about or *challenge*, certainly, but do so in the service of *drawing attention to the **potential contributions** of your project.* This is the time for ***positive thinking**.*
- Adopting a *tentative, unsure, or apologetic tone.*

  When you are ***envisioning** your **ideal** research future*, do so ***with confidence**.*

2.6 Identifying Your Problem Collective

- **Exercise 2.13 (Change One Variable)** *The **goals**: To distinguish between the **problem** and a **case** of the problem. To identify which **components** of a research question are "**indispensable**" to that question, and are thus most **indicative** of the underlying research **problem** you are trying to solve. You will then be better able to **identify other studies** that share your Problem.*

  1. *Begin by **writing down** your research **questions** as specifically as you can, in whatever*

form they are currently in.

2. *Each question should contain as many of the following variables as possible:*
   - *Time*
   - *Place*
   - *Agent/Subject*
   - *Object*
   - *Hypothesis*
3. *Starting with this formulation of the question, we can use a technique that involves* ***changing the question methodically, one variable at a time****.*
4. *Each time you change one variable,* ***ask yourself these questions****:*
   - *Do I care more or less?*
   - *Is something lost or gained?*
   - *If I had to guess, why have things changed (or not)?*
   - *Is the way I wrote my question as honest and comprehensive as it could be? Is this my complete question, or is it missing a variable?*
5. ***Write*** *down, next to each "changed variable," a few notes that capture what is going on inside your mind.*
6. *After you've run through a series of permutations, take stock of the process by* ***categorizing*** *all of your variables into these two categories.*
   - ***Negotiable or fungible variables****. These variables can be changed without influencing your level of interest.*
   - ***Non-negotiable variables****. These variables, when changed, lead to the* ***evaporation of all interest****, even when (ostensibly) your topic is still present.*
7. *Ask yourself these questions:*
   - *When I see this list of* ***negotiable versus nonnegotiable variables****, what does my* ***Problem*** *really seem to be?*
   - ***Why*** *is it that I seem* ***unconcerned*** *with some variables being changed, while others seem sacred?*
   - *When more than one "non-negotiable" is left over, which one is* ***dominant****?*
   - *Which is the* ***problem****, and which is the* ***case*** *of the problem? Put another way, is X a case of Y, or is Y a case of X?*
   - *Does my question, the way I first posed it, really capture my Problem, or is it simply a case of my Problem?*
   - *If the latter, might there be a way for me to* ***rephrase*** *my question such that, while it remains as* ***specific*** *as before, it comes closer to articulating the* ***core issues*** *in*

my work?

Common **Mistakes**:

- *Making **substitutions** that **are far too small***, and *choosing new variables* that are ***far too similar***, to meaningfully test the importance of the variable to your research interests
- Skipping the steps of ***assessing which variables are negotiable*** (meaning that the revised question is of equal or greater interest to you than the original one) and ***which non-negotiable*** (meaning that your interest in the research question drops or disappears if you change the variable)
- Making substitutions that are *impossible*, *illogical* (e.g., anachronistic), or *otherwise untenable* because they are not supported by fact
- *Not writing down* your assessments of which variables are negotiable or non-negotiable
- Applying the problem/case distinction *only to **your work***, instead of also *using it to **identify members** of your Problem Collective **in other fields***

- **Exercise 2.14 (Before and After)** *The **goals**: To identify the problem within a topic that most interests you by **envisioning** your research project within a **larger problem-driven story**. To then **find** other members of your Problem Collective who are contributing to that story.*

  Follow these steps:

  1. ***Envision** your study as a chapter in a research book focused on your Problem.*
  2. ***Write down a sentence describing your study**, as best you can summarize it. Use this as a placeholder title for your "current chapter" – the project you are actually working on.*
  3. *Now **imagine a logical progression** of a broader, book-length study delving into your Problem:*

     *What would be **the titles of the chapters** that **precede** and **follow** yours?*

     ***Write down a chapter title for each of them**. If you want to go further, think of what additional chapters of this hypothetical book might focus on.*
  4. *Give that **book** a compelling and descriptive **title**.*
  5. *Now come up with **at least two** (and ideally more) **alternate scenarios**.*

     Repeat the above steps, coming up with titles for the current chapter, the preceding chapter, the next chapter, and the book.
  6. *For each hypothetical book, **fill in a chart** like the one shown in table 8.*
     - *Book title:*
     - *Preceding chapter:*

- *Current chapter:*
- *Next chapter:*
- *Excitement level: (low/medium/high)*
- *Why this response?*

  (Here, take as much space as you need to assess, describe, and speculate about how and why you responded the way you did to this envisioned scenario.)

Common **Mistakes**:

- ***Talking yourself into "liking" a hypothetical project that your mentor suggests*** or that seems to be the "obvious" choice because it is related to the topic.

  Avoid the power of suggestion*, and* ***trust your instincts.*** If you find yourself hesitating, take note of that.

- *Ignoring an instinctual feeling* of disinterest or boredom in a hypothetical project, or not taking the time to consider why you feel aversion to a potential project choice. ***Dislikes can be instructive.***

- Based on this envisioning exercise, feeling like you need to *undertake a* ***major project*** *whose scope is* ***far beyond what you can realistically accomplish****.*

  Remember that the *goal* is to ***pinpoint the problem that excites you*** *so that you can* ***find other members*** *of your* ***Problem Collective****.* Again: write, search, write!

- **Exercise 2.15 (Map Out Your Collective (Secondary Source Search))** *The* ***goal****: To use one* ***secondary source*** *from your* ***Problem Collective*** *to find many* ***more*** *Problem Collective sources.*

  1. *Discover one piece of writing by a member of your Collective*
  2. *Read the* ***table of contents****, the* ***abstract****, the* ***introduction****, the* ***conclusion****.*
  3. *Skim the body of the text.*
  4. *Comb through the* ***footnotes*** *and the* ***bibliography****.*
  5. *Take note of any title that jumps out at you, no matter whether or not this work has any surface-level connection*
  6. ***Add*** *all of these* ***sources*** *to* ***your own research bibliography***
  7. *Get your hands on every one of them you can, and go through the same process with each of those new sources.*
  8. *Repeat this process until you feel confident that you have made enough connections to begin some* ***serious reading****, starting with the most promising works.*
  9. *And as you read through these works more closely, and as you discover the ones that really do seem to be tapped into the same problem as you, ask yourself the following questions over and over:*

- *What does this author **call my Problem**?*
- *What is this author's **word** for the thing that disturbs me?*
- *What **vocabulary** does this author, who clearly seems to be kept awake at night by the same gnawing question as I am, use to **describe themself**, whether professionally, intellectually, or otherwise?*

10. *Write down the answers to these questions. Indeed, write down anything that comes to mind,*

Common **Mistakes**:

- Not using the results of the "***Change One Variable***" exercise in this ***keyword search***.
- *Dismissing your* **instinctual feeling of interest** *in or attraction to a secondary source* because, on the surface, ***it doesn't appear*** *to be directly related to your case*
- *Not writing down your answers* to the three questions about how the secondary sources you find describe or define your Problem
- ***Giving up early**, or **not repeating the process** of analysis and introspection with **multiple** secondary sources*
- *Only examining secondary sources that are **in your Field***, meaning that you likely have not significantly changed your variables in the "Change One Variable" exercise

2.7 Rewriting for Your Collective

- **Exercise 2.16 (Find and Replace All "Insider Language")** *The **goals**: To identify language in your writing that make sense only to members of your Field and to rewrite so that you can connect with members of your Problem Collective*

1. ***Read your Field writing with Collective eyes**.*

   *Print out a copy of your draft research proposal, and then **highlight** every instance of "**insider language**" you can find. Use different colors for different types of insider language*

2. ***Rewrite your way out of your Field**. Now that you have annotated your document, **rewrite** just those parts that you've **highlighted**. For each, do the following at first mention:*
   - ***Individual**. Provide the full name, preferably with a brief biographical description.*
   - ***Institution**. Describe it in sufficient **detail**.*
   - ***Technical term**. Remove and replace with a **description** of the phenomenon or principle. If it is necessary to retain the term, define it.*
   - ***Adjectives and adverbs**. Find any words that are secretly trying to "smuggle in" **judgment statement** and replace them with language that is more **specific**, **open-ended**, and **transparent**.*
   - ***Event**. Briefly explain what happened, and any relevant context.*

- ***Acronym***. *Remove and replace with the full name, or a brief description*

Common **Mistakes**:

- *Neglecting to* ***highlight*** *obscure or Field-specific adjectives, adverbs, and verbs*, in addition to the obvious nouns.
- Using *only one highlighting color* (or font or notation style or other unique identifying mark- up technique), instead of several, which can help you more *systematically and precisely identify your habits of using insider language*
- *Replacing Field terms with different Field terms*, instead of with language ***comprehensible to a nonspecialist***

2.8 Organizing Your Field into Problem Collectives

- **Exercise 2.17 (Start Your Own "What's Your Problem?" Bookstore)**

- **Exercise 2.18 (Change Their Variables)**

2.9 Rewriting for Your Field

- **Exercise 2.19 (Rewrite for Your Field)**

2.10 Formal Drafting and Revision

- **Exercise 2.20 (Create "Draft 0")**

- **Exercise 2.21 (Move from 0 to 1)**

2.11 What is Next?

- **Exercise 2.22 (Find a New Problem and Start a New Project)**

- **Exercise 2.23 (Help Someone Else)**

3 Sounding Board and Research Network

3.1 Building Research Network

- **Exercise 3.1 (Start Building Your Research Network)** *Start building your research network – a community of people you can consult with and seek advice from during the research process.*

  1. *Make a list of teachers, colleagues, students, and fellow travelers you think would be willing and available to discuss ideas with you on a periodic basis.*
  2. *Circle a couple of names on your list of potential Sounding Boards.*
  3. *Choose a few of the questions you've generated while reading this chapter, and make a meeting to discuss them.*
     - *Tell them you're not trying to settle on a research question just yet.*
     - *The goal is to get on their radar, and to start* ***the process of communicating*** *about your research ideas* ***orally*** *– since you've already done some writing.*
     - *You could send them your questions in advance, but strive to make it a casual conversation.*
     - *Spend some time generating questions about a topic together.*
  4. *And say Thank you. You may well be seeking them out again.*

3.2 Identifying Primary Sources

- **Exercise 3.2 (Get Leads on Primary Sources)** – *When you are searching for your Problem, or verifying that the problem you've been working with is the right one for you, it might still be* ***too early*** *to talk to a Sounding Board about your assumptions.*

  – *What your Sounding Board can help you with at this stage is* ***finding primary sources*** *that you can use to educate your questions.*

  Describe those exercises *to your Sounding Board, and* ***ask for suggestions*** *of other databases or archive catalogues or* ***repositories*** *of* ***primary sources*** *you might use.*

3.3 Project Planning Consulting and Proposal Sharing

- **Exercise 3.3 (Is Your Decision Matrix Complete?)** – *After you've done your own assessment of the practicalities of various research scenarios and* ***written*** *them down in your* ***decision matrix****,* ***discuss*** *them with your Sounding Board.*

  – *They might be able to point out* ***sources or research tools*** *(or constraints) you weren't aware of, or to* ***introduce*** *you to* ***people*** *with firsthand experience of the archive you hope to visit.*

  – *A* ***conversation*** *with your mentor can be an efficient way to* ***refine your scope****.*

- **Exercise 3.4 (Share Your Proposal with a Trusted Mentor)** *1.* ***Read*** *through your own proposal. Verify the goals, sources, methods, assumptions etc.*

2. *Then – and this is totally **optional** – show it to someone you **trust** and **solicit their feedback**. **Explain** the goal of this drafting exercise, as described above.*

   Does the proposal make an effective case for why this project is compelling and important?

3. *Oral or written **feedback** are both welcome, but if possible set up an **in-person meeting** to hear what they have to say.*

4. *Write down their **suggestions**, and*

5. *then – be sure to do this before proceeding to part 2 – **rewrite your proposal** based on the suggestions you agree with.*

6. *Then send a message of thanks*

3.4 Evaluation of Proposal from Outsider

- **Exercise 3.5 (Does the Lay Version of My Proposal Make Sense?)** *1. Now that you've systematically identified all of the various types of insider language in your research proposal, replace those terms with language that could be understood by a lay (nonexpert) reader.*

   2. *Then ask someone who is **not a subject matter expert** (i.e., someone who possesses no specialized knowledge of your topic) to **read** that version of your proposal and **highlight** any parts that don't make sense to them.*

      when we get close to our subject matter, it's easy to lose perspective.

      - *Which words or phrases do they find confusing?*
      - *Can they follow the logic?*
      - *Which passages puzzle them?*

   3. ***Rewrite** those sections until they become clear.*

   Your Sounding Board can help you to express your research problem more clearly.

3.5 Finding a Sounding Board in Your Field

- **Exercise 3.6 (Find a Sounding Board in Your Field)**

3.6 Being Your Own Sounding Board

- **Exercise 3.7 (Talk to Yourself)**

4 Introduction

4.1 Self-Centered Research: A Manifesto

- In this book, we advocate a "self-centered" approach to research.
- ***Self-Centered Research*** is the following:
  - A ***practice*** of research that emphasizes the importance of setting out on the research journey from exactly where you are right now, and maintaining close contact with your own self – your instincts, your curiosities, and your biases– throughout the process.

    To be a "self- centered" researcher is to maintain your center of gravity over your own two feet at all times, and to ***avoid pursuing topics and questions*** *that you* ***imagine*** *might* ***please*** *some* ***imaginary, external judge****.*
  - An ***ethic*** of research that involves ***consciously acknowledging*** *and* ***assessing*** *your* ***abilities*** *and your* ***limitations*** as a researcher. It involves being *centered*: ***knowing*** *who you are*, ***listening to your own instincts***, ***trusting*** *them* even when they sound naive or inarticulate, and ***refining*** *them during the research process.*
  - A ***state*** of mind that ***affirms the value*** *of your ideas*, *assumptions*, and concerns in shaping your agenda and ***the direction of your research***. It presumes that the better (and faster) you figure out your own concerns and motivations as a researcher, the better (and faster) you will discover a research problem that is deeply meaningful both to you and to the world at large. But the first person who must be deeply concerned with your research problem is you, the *researcher*.
- *Self-Centered Research*
  - *does not* mean *unleashing (or inflating)* your *ego*. Being self-centered is not being self-absorbed, self-obsessed, self-congratulatory, self-consumed, self-indulgent, self-involved, self-serving, or self-ish.

    Quite the opposite: self-centered researchers are ***self-reflexive***, and always ***self-critical***; *honest* and *probing* about their own interests, motivations, and abilities; but also ***open*** and ***confident*** enough to *assess* the validity of others'. This means having the wherewithal to ***challenge*** received wisdom, including unfounded ideas you are probably carrying around without realizing it.
  - is also ***not autobiographical***.

    It does not imply that the papers, articles, reports, or books you write will tell the story of your life. Or that every documentary you produce, or painting you paint, will be a self-portrait.
- ***The end goal*** of the Self-Centered Research process is, just like conventional research processes, one in which the researcher produces empirical, grounded, theoretically informed, and compelling scholarship about some aspect of the world around us, and does so in a way that *changes* how *other* people think.
- In order to identify and solve a problem that truly matters to other people, however, the *Self-Centered Research process* insists that *this problem must matter, first and foremost, to* ***you***.

4.2 Centered Research Is the Best Research

- ***Where to begin?*** The answer is: ***Exactly where you are, right now.***
- Core to this book are two propositions.
  - First, research can be a *life-changing experience*, if you get a few things *right* from the *start.*
  - Second, the most important part of beginning a research project is ***finding your center.***
- Research is a process *not just* of *solving problems* but of ***finding problems that you*** – and other people – ***didn't know existed.***

  It's a process of *discovery*, *analysis*, and *creation* that can *generate its own momentum* and *create a virtuous cycle of inspiration.*

  Deep-seated problems only reveal themselves through ***self-trust***, ***exposure*** *to* ***primary sources***, and ***time.***
- ***Only you*** – not anyone else – can tell you *what you were meant to research.* Answering the question "What to research?" requires a *hard look in the mirror.*
- The ***goal*** of this book, then, is
  - to help you ***create the ideal conditions*** to start a fire in your mind.
  - But at the same time, it will show you how to ***maintain balance and clarity*** in situations of complexity, uncertainty, and ambiguity.
  - And it will teach you ways to tell the difference between ***unproductive uncertainty*** – that is, when you're ***on the wrong path***, and should probably turn back – and ***productive uncertainty*** – that is, when it may feel like you're lost, but where your ***inner instinct*** and ***wisdom*** are *encouraging* you to keep on going.

4.3 How to Use this Book

- ***Try This Now***

  In each chapter, you will work through practical exercises and games designed to help you achieve a specific set of goals:
  - generating questions,
  - refining questions,
  - discovering the patterns that connect your questions, and
  - identifying the problem that motivates you.
- All of the exercises rely on a core set of principles. These include
  - ***attentive***, ***nonjudgmental self-observation***;
  - giving oneself permission and *encouragement* to say *inarticulate, tentative, and vulnerable things* out loud;
  - getting things ***down on paper.***

- Whether or not you tackle everything in sequence on your first pass, the only way to get the benefit of our advice is by completing the exercises, and, as mentioned above, by ***writing things down***.
- The point of all this *continual writing* is to *produce* what we term "evidence of self," or "***self-evidence***."

  You can think of self-evidence as clues that will help you figure out the answers to the most important questions that a researcher must answer during this early phase:

  - *Why am I concerned with this topic?*
  - *What is it about this subject that I think holds the key to some larger issue?*
  - *Why does this primary source jump out at me?*
  - *Why, out of all possible topics that I could be working on, do I keep coming back to this one?*
  - *What is my Problem?*
- ***Self-evidence*** is a valuable form of *note-taking* that we believe many researchers neglect.
- We advocate making ***introspection*** a *habitual part* of your research method.
- The pieces of *self-evidence* you produce during *the Self-Centered Research* process are cousins to the kind of *notes* experienced researchers routinely make when they read primary sources, conduct interviews, carry out ethnographic fieldwork, or copy down bibliographic information.

  We call them ***self-evidence*** because, ***during this early phase of research***, ***these notes*** *will possess a* ***value*** that goes far *beyond* the *recording* of facts, quotes, observations, and other evidence about the world around you. They will ***provide evidence about you yourself***.

  With these clues you will be able to *uncover the* ***hidden*** *questions and problems* you carry around inside you.

  Discover them early in the research process and not only will you *save yourself time and frustration*, but, more importantly, you will be more likely to *arrive at the research project that is* ***right for you***.
- ***Commonly Made Mistakes***

  A list of these follows each "*Try This Now*" exercise. Most of these mistakes fall into one of three categories:

  - Not letting yourself be ***vulnerable***
  - Not ***listening to yourself***
  - Not ***writing things down***
- ***Sounding Board***

  A ***Sounding Board*** is someone who helps you to gain *alternative perspectives* on your ideas and writings and to *step outside yourself*.

  - A *Sounding Board* helps you to ***self-reflect*** and *make better decisions*, so we recommend

that you make ***talking to someone you trust*** a habit early in the research process.

  - Ultimately, *the Self-Centered Research* process will empower you to ***become your own Sounding Board***.

- Well-meaning suggestions from a teacher, adviser, or other *authority* figure – suggestions as to what you "could" or "should" work on – can have a *major impact* on a researcher during the early phases of research. If you feel lost, or uncertain about the value of your nascent ideas, these suggestions can feel a lot like a ***command***. Or it may become your fallback, your "Well, I can't come up with anything better, so I might as well go with that!"

  What if you ***skipped*** all that messy ***introspection*** and snapped up the ready-made idea that your trusted adviser has told you is important? Unfortunately, the effect can be ***inhibitory*** and ***counterproductive***.

- The point of research is *not to fall back*, it's to ***move forward*** – to take a risk and discover or create something original.

- A **mentor** can ***offer advice*** that ***saves you from retracing others' paths*** to the same conclusion.

  But when a student comes with an idea for a research project and asks, "Is this what you want?" a true mentor's response is always the same: "***Is this what you want?***"

- In our experience, if a research question is *not* one that you're *truly motivated* to spend your time answering, you'll find it a *challenge* to do a good job, or even to finish.

4.4 Introversion, First. Extroversion Second

- The *two-part process* of starting a research project involves
  - looking first ***inward*** and
  - then ***outward***.
-
  - Part 1 takes you through the ***inward-focused process*** of becoming a self-centered researcher. You will ***reflect*** on the experiences, interests, priorities, and assumptions you bring with you – and assess how to make best use of them in charting out a research direction.

    This process goes beyond *conventional* ***brainstorming*** because it requires *taking stock of your* ***values***. It involves ***distinguishing*** between

    * ***what doesn't matter to you***,
    * ***what you think matters to you***, and
    * ***what really matters to you***.

    We believe that you are best off *starting* this process *before* you field-test your ideas against the wisdom of the research community.

  - Part 2 focuses on this process of ***extroversion***. It helps you to navigate the often bewildering process of coming to terms with the research communities conventionally known as "*fields*" and "*disciplines*," as well as how to identify researchers who may not

be in the same field as you but ***who are interested in similar problems*** – what we call your ***Problem Collective***.

- **Exercise 4.1** *Writting Exercise* – **Try This Now**

  All of the writing you do with (and in) this book will help the research process by

  - *creating an* **evolving record** *of your ideas— your "***self-evidence***";*
  - **continually externalizing** your thoughts*, as an aid to memory and to your research collaborators;*
  - *building your project* step-by-step *through different types of writing,* focused *on discrete aspects of the early phases of research;*
  - *making writing a* regular research habit

5 Become a Self-Centered Researcher

- Part 1 of this book guides you through the process of centering your research questions, of aligning them with the concerns that you carry inside you.
- You will *not be writing about yourself*, but rather from yourself, instead of *from external sources*. This is a *process of self-reflective decision-making* that is crucial at the inception stage of a research project.
- The ***goal*** of this stage is to make sure that you are fully aware of your own *motivations* and *values*, are confident of your *priorities*, and have taken stock of your *assets*, *capabilities*, and *limitations*.
- Part 1 teaches you how to avoid the ever- present risk of outsmarting yourself.

5.1 Questions

- This chapter helps you navigate the first challenge you will face in your research process:

  *How do you transform broad and vague "**topics**" of interest into a set of concrete and (for you, at least) fascinating **questions**?*

- In the earliest phases of research, most people don't have specific questions in mind. They have *topics of interest*.
- The main challenge is not identifying potential topics of interest, but in moving from these ***generic topics*** to a ***specific set of questions***.

5.1.1 A Topic Is Not a Question

- A ***topic*** suggests a *field* or *scope of inquiry*.
- Having a topic makes one feel *solid*, *self-aware*, *oriented*.
- Topics can be deceptive, however. They are immense and ***abstract*** categories.
- But their use to the researcher is limited for one very obvious reason: ***a topic is not a question***.

- You can see already how topics can even be ***obstacles*** to the research process. Simply put, when we speak about topics, we could be speaking about *anything* (and thus *nothing*) at all.
- By themselves, topics are not very good guides for the research process. That's why they can be dangerous.
- When you have a *topic* and are struggling to *turn it into a project*, the common advice you will hear is "***Narrow it down.***"
- We call this ***the Narrow-Down-Your-Topic Trap***.

  A more discrete scope that reduces the volume of sources you need to analyze can, to be sure, *answer the* ***when*** *and* ***where*** *questions.* But *a topic alone* – even a "narrow" one – is ***insufficient***, because it still leaves *unanswered the how and why questions.* Tell someone your "narrow" topic, and they may still have *no clue what you're doing.* ***Even a "narrow" topic cannot tell you what to do***.

  Simply put, you cannot "narrow" your way out of *Topic Land.*
- Every researcher needs to figure out ***what to do*** and ***how to do it***.

  the question that comes before *what* and *how* is ***why***.
- Besides, "gaps" in human knowledge are infinite. *Why fill this particular gap?*
- Most researchers (even seasoned ones) instinctually try to justify their incipient research ideas using the *vocabulary* of *"**importance**"* or *"**significance**" – as defined by an* ***imaginary, external judge***.
- *Out of the infinite number of potential topics of interest, why am I drawn to this one?*

  If I had to guess, what is my connection with this topic?

  Why is it so magnetic to me?
- Here's how we'd ***phrase*** them for a researcher trying to *move from a* ***topic to questions***:

  1. ***Make yourself vulnerable.*** The questions one generates during this early phase are ***not final products***.

     at this stage, our questions *don't need to be polished* or even *coherent.* All they have to be is ***honest***, ***to the best of our knowledge***. ***Trust*** *yourself.*

  2. ***Keep the conversation affirmative and nonjudgmental.*** *Neither* the researcher *nor* the *Sounding Board* said anything to *denigrate* the researcher's *assumptions* about rationality.

     At the *brainstorming* stage, it's easy to shut down lines of inquiry *prematurely.* Or perhaps by chiding oneself with high-level language. *Resist the temptation.* Far better is simply to *allow the questions to proliferate*, no matter how seemingly *unimportant*, *naive*, incoherent, scattered, or biased they might seem.

     Whether you're working alone or with someone else, the goal at this point is ***simply to generate questions***.

  3. ***Write down your ideas.*** The researcher and *Sounding Board wrote down all the*

questions as they spilled out.

As we will emphasize again and again, during this early phase of research, thinking about things is not enough. You need to ***get things down in writing***, to create ***traces of thought*** that you can later use for other purposes.

4. ***Generate questions internally.*** The questions you should be aiming at now are those ***driven by your own knowledge, assumptions, and curiosities***.

   At this point, don't try to think from the "outside in" by trying to *generate questions* you think might ***satisfy some imaginary judge***.

- For most of us, the challenge is greater. We might be drawn to a particular topic without having any idea why. Or, perhaps more accurately, ***some part of us knows why, but the rest of us*** – the part of us that has to field questions like "Why does that interest you?" – ***still has absolutely no idea***.

- You will learn how to bring together
  - the ***intuitive*** part of you that ***knows***, but ***cannot speak***;
  - the ***executive*** part of you that ***speaks***, but ***does not know***.

- ***Questions lead us in specific directions*** – whether toward ***specific answers*** or to ***primary sources*** that we need to answer the questions or to the work of fellow scholars who are grappling with similar questions (i.e., secondary sources) or, more often than not, to more and better questions.

- Questions have another virtue. Every question a person asks about the world is *a piece of* ***"self-evidence" about the researcher*** – evidence that helps the researcher ***reflect*** *on their own intellectual, emotional, and personal motivations* for asking the question in the first place.

- The *goal* here is to ***explain***, rather than simply assert, ***one's interest in a topic***.

  They require you to ask *probing questions* about yourself

- **Exercise 5.1 (Search Yourself)** *(check in early sections)*

  The ***goal****: To use a list of* ***primary-source search results*** *to figure out* ***the aspects of your topic*** *that* ***most interest you****, and* ***draft questions*** *based on these interests.*

  1.

  2.

  3. On most of these sites, you won't be able to view the original source, only the catalogue entry. But even if a site does offer full text results, try not to get caught up in any one source for too long at this point. This is not yet the time for close reading.

  Instead— and this is key— while scrolling through your search results, try to imagine that you are strapped to an EKG machine that is recording the electrical pulses going through your system as you read.

  Which primary sources raise your heart rate, even slightly? Write them down. Which ones have no effect on you one way or another? Take note of them too (since, a bit later

on, we will also be taking stock of things that bore you!).

*The goal right now, as we said above, is to "**read yourself**" as you read other things.*

Why bother? How does this get a researcher any closer to discovering their research direction?

Given how efficient we are at ignoring stimuli*, it follows that when we do take notice of something – however small or insignificant – we should* take notice that we're noticing*. This form of* self-evidence *gives a potential clue about our underlying concerns and curiosities.*

Put plainly, whenever your mind takes notice of something – anything – you can be certain that there is a question there, even if you are not sure what that question is.

*Learn to **pay attention to these clues**, and then to uncover the questions whose presence they indicate, and you'll be able to move quickly and effectively from generic topics to precise and generative questions.*

"Noticing what you are noticing" can be surprisingly difficult.

4. *Go back to your search results. Write down, circle, or asterisk the ones that seem to **have any effect on you**, however small.*

   Write a list out by hand, copy and paste the titles of the sources into a text file, or click a checkbox to save those sources in a folder or email. However you choose to do it, take notes.

5. *Once you have an initial list of at least ten items, take thirty minutes or so to ask yourself three questions about each item, setting down your answers in writing:*

   - *What does this make me think of?*
   - *If I had to venture a guess, why did I notice this one?*
   - *What questions come to mind for me when I look at this search result?*

   Your only audience is you, so allow yourself to be inarticulate, instinctual, and honest.

6.

7.

*Common **Mistakes**:*

- *Not writing things down*
- *Getting bogged down in **individual sources too soon***
- *Excluding "fluke" search results that **seem unrelated** to the keywords you entered in the database or unrelated to your topic*
- *Feigning interest in a search result that seems "**important**," even if it doesn't really interest you*
- *Only registering interest in search results for which **you think you know why** you're interested in them, instead of being more **inclusive***

- *Trying to make a list of noticings that is **coherent** and fits together*
- *When speculating about why a search result jumped out at you, worrying about whether or not the reason is "**important**," based on some **imagined external standard***

- **Exercise 5.2 (Let Boredom Be Your Guide)** *The **goal**: To become **attentive** to your **active dislikes**, identifying questions that you "should" (in theory) be interested in based on your topic of interest, but aren't. By **understanding what you don't care about** regarding your topic, you accelerate the process of figuring out what you do care about.*

  *After all, the most common reaction human beings have to **boredom** is **avoidance**. We try to dismiss or ignore things that bore us.*

  ***Boredom is a powerful teacher**, and **deserves our attention**. Boredom is not the same thing as disinterest or lack of interest. It is not a passive experience.*

  *Boredom is an **active sentiment**, a **rejection** of something that, like excitement, provides you with more self-evidence through which you can understand your concerns and motivations more clearly.*

  *By **taking note of your boredom** – in precisely the same way you just did with your excitement – you will gain clues about what your real research questions and problems might be.*

  Ask yourself:

  - *What about your chosen topic bores you?*
  - *Among the potential questions or subtopics that derive quite naturally and obviously from your stated topic, which ones repel you, perhaps even unnerve you?*

  *Taking account of your boredom is part of your conversation with your research-self. Besides helping the process of **elimination**, steering you away from **unprofitable lines of inquiry**, boredom can also help you to ask better questions and zero in on your Problem.*

  Common **Mistakes**:

  - Denying boredom, or feigning interest in something because you feel it's "on topic" and demands your interest because it's "important."
  - Engaging in circular logic.

    Boredom, like inspiration, is a dynamic process that happens between you and whatever it is you're interacting with. The sensation of boredom is the by-product of reactions between the substance that makes you you, and the substances of the reality you're encountering.

- **Exercise 5.3 (Go Small or Go Home)** *The **goal**: To generate **specific, fact-focused questions** about your topic before you've done in-depth research. These will lead to bigger questions later on.*

  *Try to **avoid** posing questions that strive to be **profound** or too **big-picture**. If you find yourself asking questions about the essential "meaning" or "significance" of your topic, chances are you are thinking too abstractly.*

*Remember, too that question means question – **with a question mark** – and not a statement or sentence fragment masquerading as a question.*

*Again, your goal here is not to **justify** the significance of your project **to someone else**. You need to start with questions about **basic facts**.*

***Specificity** is the goal at this point, for two reasons*

- *First, it is only through small questions like these that you can begin to **form a picture in your mind** (and in your notebook) about the **core fundamentals** of the topic you are researching.*

  *To try and answer "profound" questions at this point – about "meaning" and "significance" – is **premature**, since you don't yet have the facts, much less the opportunity, to analyze them.*

  By contrast, the more facts you know the greater command you begin to have of your subject matter. This, in turn, prepares you for the process of asking "bigger" questions – "profound" questions – when the time is right.

- *Second, lurking in one or more of those "small" questions may be an **unexpected question** that could, when you hear yourself ask it aloud, send your research off into an entirely **new direction**.*

*When you begin to ask (and then to answer) precise and seemingly **mundane** questions like these, you begin to **liberate yourself** from the confines of **vague** and **unproductive** "**topics**," moving instead toward specific and coherent clusters of questions that will, over time, add up to something compelling, **open-ended**, and **doable**.*

*Asking **precise factual questions** is one **key** to **escaping Topic Land**.*

Common **Mistakes**:

- Asking vague, grand, abstract, or big-picture questions about "meaning" or "significance," instead of specific and **precise factual questions**
- Not asking actual questions (with a question mark), but instead writing statements or sentence fragments – **topics masquerading as questions**
- Not asking a question because **you think you couldn't answer it**, perhaps because you think that the data doesn't exist or is unattainable
- Asking **too few questions**, resulting in an inadequate quantity of self-evidence

5.1.2 You Have Questions

- Most importantly, in formulating these possible research questions, you've set aside for the time being any *concerns* about *whether or not your questions are Important*, with a capital *I*.
- Your list of questions contains questions that ***matter to you***, even if you don't know why yet.
- As a bonus, you also have *an initial set of primary and secondary sources* from your database searches.

5.2 What's Your Problem?

- In this chapter, you will begin to *find and use primary sources*, and you may find the answers to at least some of your questions. But answering questions will not be the primary focus. ***Educating your questions*** *will be the focus.*
- It is a fundamental part of this stage of research: your questions are *underdeveloped* at this point because you have not yet had the chance to conduct research into your subject matter.
- it is true that it takes a lot of research to ***arrive at the right questions***. And then it *takes more research* to ***answer these questions*** and ***generate new ones***.

  In this early stage of research, ***the goal is not****, as many assume,* ***the generation of answers***. It is about *the* ***refinement*** *of your existing questions* and *the* ***generation*** *of* ***new*** *(and better) ones.*
- The goal of this chapter is to help you ***identify and articulate the problem*** underlying your many research questions.

5.2.1 Don't Jump to a Question (or You'll Miss Your Problem)

- Here's a simple way to *distinguish* a *problem* from a random set of *curiosities*:

  if it ***changes*** *by the day, week, or month, chances are it's a* ***passing curiosity****. If it* ***endures****, it just might be a* ***problem****.*
- A problem is a nagging presence within you – one that *disturbs*, *bothers*, and *unsettles* you, but also *attracts*, *compels*, and ***keeps you coming back***.

  A problem is something that ***follows you around****.* it calls out for you to try to solve it.
- Your job is to give that problem a ***name***, to ***identify*** a ***case*** *of that problem* that you will be able to study (given your personal abilities and constraints), and to figure out ***how*** *to study that case* so that you might arrive at a *broader solution.*
- Researching a problem requires asking questions, of course, but (again, to state the obvious) ***a question is not a problem****.*
- You can think of plenty of questions that have answers, but whose answers do not solve any problem. So you want to make sure that *your questions are indeed* ***problem-driven****.* This is why it is so important not to jump to a question.
- A ***problem*** has several ***functions*** for the researcher, among them the following:
  - It ***motivates*** you to *ask questions about your topic.*
  - It *determines* ***which*** questions you ask.
  - It ***defines*** the *what/why/when/how* of *your engagement with your topic.*
  - It ***guides*** the *path of your* ***inquiry****.*
  - It ***shapes the story*** you tell when the time comes to share your research results.
- The next steps in this chapter will help you figure out
  - how to *improve the questions* you have already generated;

- how to use sources to *identify the problem* motivating your questions;
- how to use your Problem to *generate new and better questions.*

- What the early-stage researcher has to ***avoid*** is ***jumping to a question***. You have generated many questions, and the risk now is that you'll feel pressured to jump ahead and ***choose one prematurely***.

  The Jump-to-a-Question Trap can be as harmful as *the Narrow-Down-Your-Topic Trap.*

5.2.2 Stress-Testing Your Questions

- Now that you have done the work of producing a multitude of questions – small, factual questions, ideally – you will still need to ***stress-test***, ***refine***, *and winnow them out*, *removing any dead ends*, *enhancing the rest*, and *adding additional questions* that will better serve your research process.

- Here are *two ways* to stress-test your questions and improve their soundness.
  - The first ***focuses on language***;
  - the second is subject-specific and ***focuses on sources***.

  We recommend that you tackle them in that order

- **Exercise 5.4 (Run a Diagnostic Test on Your Questions)** *The* ***goal****: To ensure that the vocabulary, grammar, and phrasing of your questions are* ***specific*** *and* ***unprejudiced*** *so that they do not presume a certain outcome.*

  1. *have you phrased them in more general, and vaguer, terms like "This is an examination of .... ," "I plan to explore ... ," or "My project is about the question of ... "?*

     If you find yourself articulating your questions as "I want to examine how" something happened, there is a fair chance that what you have are not really questions at all, but rather ***topics disguised as questions****.*

  2. *Do your questions rely on broad, generic, imprecise, or sweeping adjectives Try to cut such adjectives and adverbs out entirely.*

  3. *Do your questions depend upon collective nouns? If so, do your best to replace these nouns with more precise demographic categories*

  4. *Do your questions contain verbs like "influence," "affect," "shape," or "impact" or passive constructions such as "was affected by," "responded to," or "reacted to"? In such cases, chances are high that you are building your questions in such a way that they* ***rule out*** *an entire set of* ***possible*** *answers and outcomes.* ***Rephrase to avoid presumptions*** *that could result in confirmation bias.*

- By the end of this process, your questions should meet these criteria:
  - ***They should be clear, precise, and jargon-free***. If your questions are too hard for a colleague or mentor to understand, this means that you (and not they) still don't get what your Problem really is.
  - They should be ***rooted in verifiable and falsifiable data***. Your research questions

should have **integrity**. This means that they should be inspired by fact, rather than by speculation, prejudice, or opinion.

  - They should be ***indifferent to the outcome***. A research question *should not presume a certain answer*. If yours does, rewrite it to *eliminate that presumption*.
  - They should be ***clear*** *about the* ***subject***. Your questions should not be reliant on broad categories of identity. Be as specific as you can be about the *who* in your question.
  - They should be ***raw*** and ***undisciplined***. At least for now.

    If the questions seem *random* to you, let them be *random*. If they seem *unrelated* to one another, let them be *unrelated*.

- ***Leading questions*** are so *common* and so *prejudicial* to the research process that it's worth looking at one extended example.

  What you want to avoid is building your questions in such a way that you actually ***need*** *this "influence" to exist* in order for your questions to be *viable*. Almost inevitably, you will end up discovering ***specious*** *"proof" of influence* in primary source material, misleading both your readers and yourself.

- **Exercise 5.5 (Use Primary Sources to Educate Your Questions)** – *The* ***goal****: To learn how to* ***run keyword searches*** *designed to* ***enhance*** *or "educate" the* ***questions*** *you are asking about your topic.*

  These searches ***uncover primary sources*** *relevant to your research that themselves contain* ***new keywords*** *you were previously unaware of (thereby enabling you to run follow-up searches to reveal even more, and more useful, primary sources).*

  - *This next exercise requires you to delve back into your* ***specific subject matter*** *and into* ***primary sources****. Rather than trying to use primary sources to start answering the questions you've come up with, we want you to use them to* ***develop****,* ***refine****, and* ***expand those questions****.*
  - *How do we use primary sources to strengthen and "educate" our questions? The answer is simple: primary sources* ***alert*** *you the* ***existence of other primary sources****, exposure to which helps you* ***ask more mature questions*** *about your subject.*
  - *In this earliest stage of finding primary sources, then, your main goal is actually not to start answering your questions, but to use the primary sources you do find to* ***reveal new keywords*** *that you did not know existed – keywords that you can then feed back into the search process, in order to* ***uncover more and better primary sources****,* ***more and better keywords****, and most importantly of all,* ***more and better questions****.*
  - *Should you really be expected to read, notate, and cite even more sources?* ***Not necessarily.*** *you're* ***improving*** *your grasp of your topic by* ***eliminating blind spots****.*

    Whenever you do a keyword search, ask yourself:

    * *Are there other search terms I should be using?*
    * *Might there be different spellings of the search terms I already have?*
  - *You need to be as* ***confident*** *as possible that the search results you are getting are*

broadly representative and reflective *of available primary sources, and not the by-product of narrow or unrefined searches.*

- *In some cases, you might be fortunate to find a primary source, like a historical dictionary, that explicitly addresses the shifting nomenclature surrounding the very topic the primary source is about, outlining for you the varied ways a given idea, place, community, practice, or the like has been named and renamed across time and space.*

  Even in such cases, however, remember that a primary source still is subject to its own ***limitations****. But for your current purpose of finding more* ***generative keywords****, the source can be useful to you whether or not its data or conclusions are accurate, so you can defer judgment on those questions for the time being.*

  The goal for now is to determine if this source will lead you in the ***direction of further primary sources*** *that you wouldn't have been able to find otherwise.*

- *As you continue to use primary sources to further "educate" your questions, two other helpful things will inevitably happen:*

  * *you will end up* ***answering*** *some of your questions along the way,*
  * *and you will find that some are* ***not*** *actually worth answering.*

  In other words, you will discover that some of your initial questions can be ***scrapped****. This is precisely what you want to happen.*

- *as you learn more, your* ***instincts*** *regarding your subject matter improve. In "educating your questions" you are* ***educating your instincts****.*

- **Exercise 5.6 (Make Your Assumptions Visible)** *– The* ***goal****: To become aware of the assumptions you bring to your research project and use them to identify the problem that motivates your research questions.*

  - *Now that you've analyzed your questions using the two techniques described above, there is still one more thing you need to do:* ***identify the assumptions*** *that underlie your questions, make them visible, and make peace with them.*

  - *You arrived at your topic and your questions with a whole mess of assumptions.*

    After all, these are the reasons why you thought the topic is ***interesting*** *and why you think your question is the* ***right*** *one for you.*

  - ***Dispelling misconceptions*** *can be useful in many pedagogical and research settings. Yet the dispelling process, however well meaning, can have an* ***inhibitory effect****.*

  - *Your assumptions about the world – even the most naive or negative –* ***serve*** *you at this point in the research process.*

  - *They are what helped you* ***notice a detail*** *in a primary source. It was the* ***gaps between your assumptions and the world*** *as it really is that* ***gave rise to all those specific research questions****.*

  - ***Write down every possible reason*** *why you might think what you think, even if you're uncertain,* ***without judging*** *them as good or bad.*

*The point here is not to "expose" your assumptions in a negative way. Rather, the **goal** is to **bring to the surface** those parts of your thinking that remain **invisible** yet **influence** how you think.*

*you're **admitting these assumptions** to yourself so that you can improve your own thinking. There is **no external judgment** here.*

- ***Self-Centered Research*** is premised upon a very different approach to ***assumptions***, as follows:
  - *Assumptions should be made **visible**, and thus **vulnerable**.*
  - *Assumptions **should not**, however, **be** stigmatized, **silenced**, or driven underground*, since this, counterintuitively, encourages holding on to them more tightly.
  - *Assumptions are fuel **to be consumed**.* Using them, you can achieve two goals at once:
    - *you can move in a **new direction***, and
    - *you can **exhaust your assumptions** in the process (meaning that you will eventually need new fuel).*
- Your assumptions *shape your **expectations about reality**.* And when those expectations are *not met*, it's time to *pay attention.*
- **Exercise 5.7 (Identify the Problem That Connects Your Questions)** – *The **goal**: To **identify** the problem underlying your multiple draft research questions*
  - *By now, you have completed several exercises to produce a large number of questions about facts related to your project. What you now want to figure out is, What is the problem that connects your questions?*
  - – *What relationships can you find between the different questions and fragments you have created and gathered thus far?*
    - *What motivates your search for these particular facts?*
    - *You could have asked any questions about this topic – why these?*
    - *Which questions are the most compelling to you (and which seem less important)?*

    Figure this out, and you'll have accomplished a major breakthrough: you'll have identified the underlying pattern that connects all (or most) of your questions in a coherent whole.
  - *The higher-level questions might not all add up. Don't force them to.*

    *What are the **parent categories** that connect two or more of your questions?*

    *The connective tissue might not be obvious immediately. Finding it might require thinking **counterintuitively**.*

5.2.3 You Have a Problem (in a Good Way)

- You have now taken a close look at your many factual questions and **grouped** them under **parent categories** by **shared concern**.
- You have formulated higher-level questions motivated by these concerns.

- The key concern that overshadows all others might have emerged in a flash or intuition.
- How do I know when I've truly discovered my Problem?

  A problem is never a fleeting thing. Rather, it is something that is ***sustained*** and ***enduring***.
- They are good to have, good to worry about, good to mull over.
- Ultimately, however, the final decision can only come from ***you***.

  Only you can know whether or not the cluster of fascinating questions you've generated thus far add up to a problem, or just a highly sophisticated and interesting set of curiosities.

5.3 Designing a Project that Works

- Having arrived at a problem, now you must make decisions about *what you can accomplish, given your available resources.*
- In particular, you need to think about ***the primary sources*** you'll need to answer your questions and solve your Problem, as well as the ***resources*** you'll need (including time!) to put together a ***project.***
- The issues this chapter deals with are both *conceptual* and *practical*:
  - What are primary sources?
  - Which ones can you actually access?
  - How can you discover the full potential of a source related to your topic, or look beyond the obvious questions one might ask about a source to arrive at something original?
  - How can you use such sources to pinpoint your Problem?
  - What arguments can you make with your sources?
  - How many sources can you acquire? How much time will you have to analyze them?
  - How should you design your project, given your personal work habits, material constraints, or deadline?
- ***Project planning*** involves ***self-assessment*** *and* ***visualization.***

5.3.1 Primary Sources and How to Use Them

- ***Sources*** are essential to original research, so figuring out how to identify, evaluate, and use them is a crucial practical consideration.
- Researchers conventionally divide sources into two general categories:
  - ***primary sources*** and
  - ***secondary sources.***
- Research guides typically define ***primary sources*** as "original" or "raw" materials.

  They are the ***evidence*** that you use to ***develop and test claims***, ***hypotheses***, and ***theories about reality.***

- In machine learning situations, ***the primary sources*** include:
  - ***the original datasets***;
  - ***the original codes***;
  - ***the original experiment notebooks***.

  Both original codes and orignal datasets are key to *reproduce* the experiment results, which is *the main message* behind a publication and its associated research argument.

  The ***publication itself*** and its ***experiment results*** are all ***secondary sources***.
- Most research guides define ***secondary sources*** along similar lines.

  Secondary sources are *books*, *articles*, or *reports* that are ***based on primary sources*** and are intended for scholarly or professional audiences,
- we also want to reinforce a point well known to veteran researchers about *the* ***dangers*** *of defining "****primary****" and "****secondary****"* ***sources*** *in terms of* ***absolutes***.
- Absolutist definitions of sources get in the way of the process of identifying primary sources and asking research questions, for two reasons:
  - Any source can be *primary*, *secondary*, or *not a source* ***for your project***.
  - A source's *type* is determined solely by ***its relationship with the questions*** you are trying to answer, and *the problem* you are trying to solve. A source is never inherently primary or secondary.
- A more accurate *definition* of ***primary source*** would be the following:

  a ***source*** *that is* ***primary*** *with respect to a* ***particular question***.
- Let's take this one step further. Just as the same source can be "primary" or "secondary," depending upon context, so too ***can the same source be "primary" in dramatically different ways***.

  The very same source can show up in the bibliographies of strikingly *different research projects*, and can be used by different authors to *pose dramatically different kinds of questions*.
- ***how you treat this source*** will lead you down either a narrow path or a broad avenue of potential research questions.
  - The narrow route is to *jump to the obvious candidates*.
  - Or, let's brainstorm for a moment ***different*** *kinds of* ***research projects*** that might conceivably include this source
  - And go one step further and brainstorm what ***other primary sources***, depending upon the particular research project in which it appears.

  Based on what we come up with, let's then give a ***name*** to *the* ***genre*** *of questions* we're asking, on the assumption that it might be *connected* to *an underlying problem*.
- Take a note and create a table with columns as
  - What I notice about the source

  - Questions/concerns I might have
  - The very next primary source I might want to find
  - Broader subjects and/or genres of questions that might be related to my problem

- **Exercise 5.8 (Treat Your Primary Source Like a Cereal Box)** *The **goal**: To adopt the habit of **asking multiple genres of questions** about each of your **primary sources** so as to **identify problems that are not self-evident** and thus might easily be **overlooked**.*

  This technique will both enable you to decide which problem interests you most, and enhance your ability to conduct original research.

- **Exercise 5.9 (Envision Your Primary Sources)** – *The **goal**: To identify places you might not have originally considered looking for primary sources. This will **enhance the comprehensiveness**, **originality**, and **significance** of your research.*

  - *Doing original research requires looking where no one else has looked for a solution to your Problem.*
  - *Researchers nowadays often make two major mistakes here. They think that*
    - *all of the information they need to do their research well is available online; and*
    - *all of the information available online is searchable*

    In fact, digitized materials make up only a small fraction of the total number of primary source materials.
  - *Instead of letting keyword searches define the boundaries of your source base, try closing your laptop or your browser, instead **envisioning in your mind's eye where relevant sources** about your subject might be located; what these sources might look like, in terms of their format and genre; and who or what organization might have produced them.*

    *In other words, rather than limiting yourself to what is (database results), **expand your search** to include sources that could be or even that must be.*
  - *Sometimes, in order to get to specifics, you have to think **systematically** and **institutionally**.*
  - *You can see now why you want to take the time to envision sources. Keyword searching is not always the place to start, nor does it turn up all of the results you might need.*

    *Instead, you need to **envision where sources might exist**, and only **then** go back to the work of **searching**.*
  - *You'll discover more primary sources, generate more useful questions, and deepen your research in ways you did not anticipate.*

5.3.2 Connecting the Dots: Getting from Sources to Arguments

- any argument can be made when based on *only one source*. Even with two points, or three, the puzzle is overwhelmingly *unrestricted*.
- Yet the lesson here is not just that *you need an adequate number of sources* to connect the dots of a good argument.

It's more *fundamental* than that.

- the main *challenge* becomes *not solving*, but ***creating puzzles*** that are nontrivial, not preordained, open-ended, and significant (no matter what the answer ends up being).

  In order to create puzzles, we need to be able to ***envision*** *and* ***identify unknowns***.

- the researcher needs to do the following:
  - ***Find the dots.***
  - *Figure out which dots* ***belong to your picture,*** *and which dots belong to some other picture.*

    you need to keep an open mind and be able to envision multiple possible outcomes.

    Even if you have all of your data points in hand, you still need to know how to analyze them so as to come up with the right solution.
  - *Figure out which dots* ***are not dots*** *at all.* We call these ***non-sources***. Sources are sources because they have utility for the researcher trying to answer a question or solve a problem. Their usefulness is *relative* – they may be more useful or less.

    Not everything out there is a source. A single dot could reorient your whole research project.
  - *Do all of the above in real time.* And as more dots appear on your page, the picture becomes clearer. Each additional dot adds a constraint, limiting the number of interpretations that is viable.
  - *Determine when you have enough.* It's during the research process itself that you'll learn to identify thresholds of probability, confidence, and certainty

5.3.3 Sources Cannot Defend Themselves

- Before you connect some dots (not all of them, yet) on your own project, there are ***ethical issues*** regarding the use of sources to consider.
- Writing is a different art form, however, and when you construct *the narrative of your arguments* and your *explanations*, or when you tell the story of your research findings, ***you have the choice*** *of connecting your dots using straight or curvy lines* – or, most likely, some combination of the two.
- A few key takeaways here:
  - ***Sources cannot speak for themselves***, nor can they defend themselves *against you*; thus it is *your* ***obligation*** *to* ***represent*** *them* ***accurately***.

    As soon as you start dealing with primary sources, you have to make ***ethical decisions***, the first being to *represent the sources as honestly as possible.*
  - ***Research integrity*** *requires not just dealing in* ***facts*** *but also* ***not forcing*** *them to tell a story.*
  - Connecting the dots from sources to arguments is always *a deliberate choice* involving ***ethical responsibility***.

The key here is not to avoid or downplay this responsibility, but to make these choices as ***deliberately*** *and* ***defensibly*** as possible.

- As you make choices about sources, be aware: even though sources cannot speak for themselves, this does not mean that sources are merely inert objects subject to the will or manipulation of the researcher.
- They have a kind of ***agency of their own***, even in their seeming silence.

  A source might be any of the following:

  - Incomplete or fragmentary.
  - Purposefully deceptive.
  - Wrong by accident.
  - Biased – sincere or well-meaning in trying to tell truth, but distorted by unconscious bias.
  - Motivated by an acknowledged or unacknowledged agenda.
  - Inconsistent.
- While evaluating your own sources, use the bullet points above as a checklist, and make a note of further steps you might want to take to understand them better.
- Note that even if a source you come across is any of the things described above, it can still be useful to you, so *don't reflexively dismiss it.*

  Instead, incorporate it into your ***question-generation process***.

  - Why might this source be trying to deceive me?
  - What phenomenon is this source symptomatic of?
- **Exercise 5.10 (Connect the Dots Using Your Sources)** – *The* ***goal****: To start thinking about source criticism early in the research process, while remaining flexible and inclusive.*
  - *Research, once again, is a* ***nonlinear process****, which is why we keep encouraging you to think through your ideas, your questions, and your sources in a subjunctive mode – to keep thinking* ***What if?*** *We want you to take the time to chart and rechart your course as many times as necessary before you launch your journey.*
  - *you will likely need to create your own research puzzle, instead of finding it lying on the ground, ready-made – and trying out different possibilities,* ***without jumping to a question or forcing a project****.*
  - *For this exercise, try connecting some dots using your sources, but do this in pencil so that you can erase the lines and draw new ones later.*

5.3.4 Taking Stock of Your Research Resources

- By now, you should be in a mental space where your ideas are taking shape, even as you remain open-minded about where your research might take you.

- But to turn research ideas into a research project, you need to take into account an array of other ***material factors***, including the following:
  - ***Time***. timeline, deadline, competing party timeline, total time required.
  - ***Funding***. cost, funding resources, type of research expenses
  - ***Writing speed***. available to meet deadline in short time, time frame urgency.
  - ***Family responsibilities***. family responsibilities.
  - ***Access***. access to primary sources; database, library access; political sensitivity; private data; confidential data
  - ***Risk tolerance***. risk on life, wealth, reputation etc.
  - ***Abilities***. skill sets of researchers. knowledge and expertise.
  - ***Human subjects***. subject of research; human factors
  - ***Personality***. In which kinds of situations do I find my internal battery recharged, and in which situations is it drained? Do frequent social interactions leave me feeling energized, or do I prefer solitary work? With this in mind, what kind of research will my work realistically entail? Will it entail long hours of solitary reading? Or will it involve morning- to- night lab work or fieldwork, where time to myself will be scarce or nonexistent?
- No matter who you think yourself to be right now, remember that ***research*** *is a* ***powerful process*** that can and often does *challenge* and even *transform the researcher*.
- it is OK to ***recognize your own limits*** and to act in accordance with them. It is equally OK ***not to pursue a project*** that would cause you harm.
- As we have hinted at earlier, and as we explore in more depth later in this chapter, it is possible to find your Problem in another project, and to pursue it just as meaningfully and just as rigorously.
- **Exercise 5.11 (Decision Matrix)** – *The* ***goal****: To envision which factors will likely have the greatest impact, positive or negative, on the success of your research project, and to adjust your plan accordingly*
  - *when we speak of "positive" and "negative" factors, the goal is not to cast judgments about ourselves as people.*

    The goal is to take an inventory that will give you an ***honest, unvarnished overview*** *of the different factors that will shape your project.*
  - *Create an outline, or list if/then scenarios for these factors, if that helps you.*
  - *Indicate clearly which factors will be the* ***most decisive*** *and which will be the* ***least decisive****. Use this* ***hierarchy*** *to figure out your probabilities of success with different types of research projects.*
  - *Adjust your research questions accordingly.*

5.3.5 Two Types of Plan B

- We hope that everything works out well for you. In case *it doesn't*, however, you want to *be ready to* ***pursue other possible pathways***.
- Best to learn early on that being flexible is part of the job description.
- Two Scenarios:
  - ***Same Problem, Different Case***:
    - What do you do when you've found *the right problem*, but the project you envision cannot be done for *practical reasons*?
    - Instead of *abandoning* the problem, have a conversation with Sounding Board, or mentors, trying to get at *the deeper layers* of the question.

      identify the underlying "problem" of their questions.
    - The ***key*** point here is that when you as a researcher know ***what is core to your research problem***, *rather than what is merely a "case" of it.* This gives you a kind of passport with which you can travel to all kinds of different places, times, and communities— all *without leaving behind your research "center."*
    - In short, *being realistic does not mean abandoning your ideals.*

      if your ambitions outstrip your resources, don't give up hope. Simply ***return to the problem*** that underlies your questions and your project, and ***seek out another case*** that might let you pursue it.
  - ***Same Topic, Different Project***:
    - What do you do when the project you envision could *theoretically be done*, just *not by you*?
    - There are other *limits* to the cases you could choose that go beyond questions of the ability of *sources* or *time limits.* ***Choosing the right case for your Problem*** *is also a question of* ***temperament***. It needs to ***fit*** *who you are as a* ***person***.
    - Do you fit the case of the problem? If the answer is "maybe not," don't feel bad about it. And, even more importantly, don't try to deny it.
    - You may worry that, if you give up on your case, then you have to give up on your Problem as well – but *this isn't so.*
    - As long as you are *in tune with your Problem*, and *truly understand what it is*, then it is possible to ***change your case*** quite dramatically ***without abandoning the underlying problem*** that excites and disturbs you.
    - More insight about your ***motivations*** will in turn make finding another compelling and appropriate case much easier.

5.3.6 Setting Up Shop

- *Research is a* ***craft***. And as a craftsperson, it's important that you ***set up your shop*** *just the way you like it.*

- You'll thank yourself if you take the time to think through *the* ***design*** *of your* ***work environment***.
- When setting up shop, ***details*** *matter too.* Get a few seemingly minor things right and you'll reap the gains in *increased motivation, productivity, and happiness.*
- There is nothing superficial about giving due attention to physical conditions, since it will affect the well-being of you and your research.
- Consider what you *need* (*wants* are secondary), so that you can set up shop in a way that is "*perfect for me, here and now.*"
- Here are some of the things you will need for your shop to run smoothly.
  - ***The Right Tools***.
    - If you use a note-taking system that subconsciously makes you feel *rushed* and bottled up, like a tiny memo pad, *this will affect your work.* Your ideas will have *less space* to unfold, and you'll constantly be *cutting yourself short.*
    - a note-taking system that feels *cumbersome* and *inconvenient* (like an app that requires you to have Wi- Fi access at all times, or a large sketch pad, which is hard to transport) *can easily result in writing less often.*
  - ***The Right Time of Day***.
    - *When to write?* More specifically, *at what time of day* should you *focus* on *what type* of writing?
    - ***Writing also has its seasons***, and sometimes you have to let the project lie fallow to let the soil regenerate. Take a break and go for a walk.
    - You can also ask someone, or something, to *read your work to you.* When you simply cannot bear the thought of reading through your draft another time, ask a friend to narrate it aloud.
- **Exercise 5.12 (Prepare a Formal Research Proposal)** – *The* ***goal****: To catalyze all of the "potential energy"" you've been building up thus far, by giving it a sudden, unexpected jolt— namely, by writing a* ***formal***, ***forward-looking prospectus*** *about your project-in-the-making, where you try to persuade someone to support your work.*
  - *This research prospectus will also bring into even* ***sharper focus*** *your* ***assumptions*** *right now about what other people might find compelling about your study. This is definitely going to feel* ***premature****, but trust us: it's still part of the process.*
  - *For this exercise, you're going to take the self-dialogue you've been having and turn it* ***outward***, ***explaining*** *your project to an* ***imaginary reader*** *in as coherent and* ***persuasive*** *a manner as you can at this point.*
  - *A word of caution (but also comfort): you are* ***not going to feel ready for this****. In fact, you* ***shouldn't****. After all, how could you possibly know how to explain the point of a project that is still in formation?*
  - ***pretend*** *for a moment that you are much further along in the research process than you actually are, and try to* ***convince*** *a research-funding agency to choose your project over*

all of the many other deserving applications it receives every year.

- *keep in mind two important things:*
  - *First, **research requires imagination**.*
    - *Research depends on one's ability to **envision** realities and ideas that don't yet exist. And because they don't exist yet, no amount of preparation will ever leave you "100 percent ready" to begin.*
    - *Simply put, **you never know enough to begin.***
    - *And yet: **if you don't begin, you'll never finish**. (**Bias-For-Action principle**)*
    - *under the stress of having to articulate ideas that are still inchoate and underdeveloped, your executive intelligence will kick into autopilot and start to assemble one "smart-sounding" sentence after the next.*
  - *Second, this exercise is still part of the **introspective process**. It's still taking place "behind closed doors."*
    - *You **shouldn't really submit** this proposal to public scrutiny.*
    - *The reason to do this type of **envisioning** now – even before you have done all of the due diligence on what other research exists on your topic – is to produce a type of **self-evidence** that you can generate only in this **raw, unpolished state**.*
    - *The polish will come later. For now, what you need most of all is to articulate, in written form, your earliest thoughts on a subject. **Your agenda**.*
- *Completing this exercise will not only create a record of those thoughts, but will help firm up your **self-centered foundation**, preparing you for the next big step you'll take in part 2 of delving into the wider world of **scholarship**.*
- *Make your case with confidence.*

  It's time to ask your questions out loud, and to proclaim your Problem clearly.

  Be bold, even if it all feels a bit premature.
- *since this is a **proposal for future research**, rather than completed research, you cannot justify "significance" based on any "hoped-for outcome."*

  the significance of your proposed questions cannot be pegged to one expected answer to such questions, otherwise your research will likely lead to foregone conclusions.
- *Rather, the significance of your proposal must reside in a well-articulated, meaningful, and open-ended problem that you have arrived at through primary source– based (and secondary source–based) research.*

5.3.7 You Have the Beginnings of a Project

- Everything is now in place.

  - You've checked and clarified your own **motivations** and interests.
  - You've settled on research **questions**
  - and identified the underlying **problem** that these questions belong to.
  - You've identified the **assumptions** that brought you here, and you've taken **ownership** of them.
- If you still harbor some doubts, take note of them. Write them down. But remember that you are still ***drafting***. *Uncertainties* are normal.
- In part 2, you will find even more useful techniques for *articulating, evaluating, testing, and rethinking your Problem.* You're not done with introspection.
- By this point, you should have a good sense of *what the stakes* of this research are for you, and *why* the results will be meaningful.
- You've also taken some pragmatic steps:
  - doing an initial review of some primary sources,
  - taking stock of your abilities and constraints,
  - seeking advice from your Sounding Board when necessary, and
  - choosing the type of project that best suits your temperament.
  - You've even written out a first-draft research proposal, envisioning your project in formal terms.

6 Get Over Yourself

- Your project matters to you. ***Does it matter to the world?***
- you need to venture *beyond yourself* and to ***translate*** all of these questions and problems in ways that will allow others to understand them.
- If you do your work well, *"your Problem" will become "**their Problem**" too.*
- Why should we engage with other researchers?
  - Getting over yourself is a movement from a more ***narrow*** *understanding of self* to a *more* ***expansive*** *one.* This process of exploration, discovery, and accretion is based on ***engagement***.

    Far from losing your sense of self, seeing your ideas in relation to others' can help you to *learn even more about yourself.*
  - Another reason to get over yourself is entirely ***pragmatic***: none of us, even when we do much of our work alone, inhabit a research community of one.

    In the creation of any new research, we rely on the *ideas of predecessors and peers.*

    One of the most important conversations you'll be joining is with the broader community of researchers who work on the same topic as you— a community commonly referred to as a "*field.*"

- The overarching ***goal*** for part 2 is to *become aware of how* ***other people's agendas and questions intersect with our own***, and to ***make the most of those relationships***.
- Research is never a monologue, and your research identity is not static.
- You have to navigate your *Field* (and might change or add Fields), which involves interacting with different *Problem Collectives*.
- Doing so requires remaining ***mobile*** and ***open-minded***. Yet the key to engaging with the ideas of others is to ***maintain your own sense of centeredness***.
- Once again, you'll be stress-testing your ideas, assumptions, and theories, but this time you'll be doing so using the ideas, assumptions, and theories of others.
- You will ***make other people's ideas your own***. Eventually, you'll help other people ***make your ideas their own***.
- All of this requires being receptive to change.
- You'll be engaged in a ***balancing*** act of seeking out best practices, common goals, new data and insights ***without losing confidence*** *in the face of established authorities or* ***letting others supplant your agenda*** *with their own.*
- You'll be adopting a disposition that is ***self-confident*** *and* ***self-aware***, but also ***open*** *to and* ***curious*** *about what* ***other people*** *have to say.*

6.1 How to Find Your Problem Collective

6.1.1 Identify Researchers Who Share Your Problem

- the world at large is organized according to – you guessed it – *topics*.
- You are back in *Topic Land.*
- Within our *topic-centric world*, how to find the community of researchers who share your Problem? How do you find your *Problem Collective*?
- ***Problem Collective*** is a concept for envisioning the various ***problem-centric*** *intellectual connections* and *affiliations* we can discover and create during the research process.
- A collective is a grouping of individuals who share an interest or enterprise. A ***Problem Collective*** is – you guessed it – a grouping of individuals working to *solve the same research problem whether together or independently.*
- ***Fields*** like history or political science contain members of *various Problem Collectives* (as we'll discuss in chapter 5), but they are not *Problem Collectives* themselves.
- While members of fields and disciplines share many things in common, *fields and disciplines* themselves are not defined by a commonly held problem.
- One great virtue of finding your *Problem Collective* is that it can free you from *disciplinary silos*, *professional identities*, and *the reflexive conservatism* that convinces you that your research agenda must fall within the boundaries of your *Field*.
- A Problem Collective might be small or large. It includes members of your Field – including you, of course – and members of potentially many other fields too.

- When you find your Problem Collective, it gives you
  - ***questions*** you'd never considered before,
  - a ***vocabulary*** you were unaware of,
  - ***perspectives*** *and vantage points* you did not know existed,
  - ***techniques*** you never knew about, and
  - *a sense of* ***validation*** *and* ***community***
- More than this, even, finding your collective empowers you and *gives you license to* ***pursue*** *a line of inquiry that is not* ***bound by field or discipline****.*
- You can speak with whomever was or is preoccupied with *the same concerns* as you.
- A *Problem Collective* also ***challenges*** you, ***revealing that the true purpose of studying*** such figures is not merely to do well on your final exam, to appear learned, or to expand your mind in some vague kind of way, but rather because maybe, just maybe, one of these thinkers ***holds part of the key to solving your Problem****.*
- Suddenly, you have no reason to be intimidated by famous, brand-name thinkers.
- it can take time to *grasp the problem* that underlies your many questions, and then to *find members of your Problem Collective.*
- In order to find members of your Problem Collective, you first need to confront one of research's most challenging puzzles:

  What does the world call my Problem?

- **Exercise 6.1 (Change One Variable)** *– The* ***goals****: To distinguish between the* ***problem*** *and a* ***case*** *of the problem. To identify which* ***components*** *of a research question are "****indispensable****" to that question, and are thus most* ***indicative*** *of the underlying research* ***problem*** *you are trying to solve. You will then be better able to* ***identify other studies*** *that share your Problem.*
  - *This exercise will help you to distinguish between the problem that you care about and cases of that problem, which might be multiple.*
  - *Starting with this formulation of the question, we can use a technique that involves* ***changing the question methodically, one variable at a time****.*
  - *As we do so, we pay close attention to our* ***own mental and emotional reactions*** *to each permutation, to see how our attraction to or concern for the problem intensifies, diminishes, or remains unchanged.*

    Every time you change one variable (and make sure to change just one at a time) the process is the same as before.

    Ask yourself: ***Better, worse, the same, and why****?*
  - *Obviously, you'll need to use common sense in making substitutions.*
  - *Feel free to write briefly, or at length. Either way, make sure to record what happens to your interest each and every time a variable is changed.*

- *be honest with yourself.*
- *To test out this possibility, we encourage you to* **invent new variables** *if you need to, either to be inserted into your revised question alongside the others already there, or perhaps to replace one already there.*
- *You may not end up discovering your Problem right away through this experience. You can't force your mind to make such a profound discovery.*
- *The* ***key*** *is to get yourself in t****he habit of assessing which variables matter most in your research questions****.*

  You'll find discoveries happening much faster and more clearly than before.
- *The* ***next*** *step in that discovery process is to* ***turn outward****, and* ***seek your Problem in the studies of other researchers****.*
- *Now that you can distinguish between problem and case of the problem, you can identify kindred spirits in other fields.*
- *Too many people, when trying to find their Problem Collective, limit their search to just one part of the bookstore, so to speak.*
- *Seek out members of your Problem Collective, using* ***keyword searches*** *and* ***category searches****. When you find a fellow Problem Collective member, look in their* ***bibliography****. Chances are you'll find more leads.*

- **Exercise 6.2 (Before and After)** *– The* ***goals****: To identify the problem within a topic that most interests you by* ***envisioning*** *your research project within a* ***larger problem-driven story****. To then* ***find*** *other members of your Problem Collective who are contributing to that story.*
  - *There is another way to accelerate the process of discovering your Problem and your Problem Collective. We call it the* ***Before and After Game****.*
  - *The point of the Before and After Game is not that your Problem should "become" the one recommended by your Sounding Board – that would be fatal.* ***Do not "settle" for a suggestion****, even a well-meaning one.* ***Neither*** *is the* ***goal*** *of the exercise to dramatically* ***expand*** *the research project to include an immense number of additional, complex case studies.*
  - *Rather, the* ***goal*** *is to* ***set in motion a thought process*** *in which the researcher begins to* ***examine*** *and* ***reexamine their questions from multiple perspectives*** *and in* ***multiple dimensions****.*
  - *You can benefit from this exercise whether you are writing a term paper for a class over a few weeks or working on a much larger project, like a graduate thesis or a book, since* ***it forces you to think through your orientation within the vast world of a topic****, and to make sure that* ***your approach is driven by your Problem***
  - *As always, pay close attention to how you yourself* ***respond*** *to the scenario, and get your thoughts down in* ***writing****.*
  - *Answering these questions gets you, again, closer to your Problem. But it also helps you to* ***envision****, in a* ***problem-driven*** *way, how your current research project in the*

*making **might intersect with other conversations**.*

- *Use your results from Before and After to think about the **directions** you might go **beyond your Field** to **find** members of your Problem Collective.*

  Write them down, and start searching

- **Exercise 6.3 (Map Out Your Collective (Secondary Source Search))** – *The **goal**: To use one **secondary source** from your **Problem Collective** to find many **more** Problem Collective sources.*

  - *In "**Change One Variable**," you identified which variables in your question are optional, negotiable, and fungible, and which are absolutely essential and non-negotiable.*

    *The "Change One Variable" exercise revealed that there are certain other variables that, while you may not end up researching them, would also be compelling to you – suggesting that the **boundaries** of your Problem may be more **expansive** than what your question might suggest.*

  - *Now is the time to put this hard-won self-awareness to work by **running new keyword searches** – this time in a search for secondary sources.*

  - *your objective here is twofold:*

    * *To read these Problem Collective books and articles, understand **their** arguments, and take notes*

    * *To **read yourself** as you read Problem Collective sources, to see **what kind of impact, if any, these works are having on you***

  - *If they are not having an impact on you, then this gives you a clue that perhaps this author, however interesting their research is, **might not be part of your Problem Collective**.*

    But if you do notice your pulse quickening, and your mind racing with new questions, this suggests that perhaps you have made a discovery after all

  - *by this point, you have the requisite skills of **introspection** and **self-awareness**. And this self-awareness – this work of*

    * *taking notice of yourself,*

    * *trusting yourself,*

    * *writing "self-evidence" down on paper,*

    * *analyzing it, and*

    * *then deciding your next steps based upon your new insights*

    *– will **accelerate the process of discovering your Problem Collective**.*

  - *it only takes the discovery of **one** book, one article, one documentary, or one lecture to **throw the doors wide open**.*

  - *Every new study that deals with your Problem will also yield further sources in its **footnotes**, **endnotes**, and **bibliography**.*

1. *Read the table of contents, the abstract, the introduction, the conclusion.*
2. *Skim the body of the text.*
3. *Comb through the footnotes and the bibliography.*
4. *Take note of any title that jumps out at you, no matter whether or not this work has any surface-level connection*

– *Indeed, the fact that these books and articles* ***don't deal with the exact same thing as you*** *– the same place, person, or time period – is precisely the point. That* ***distance*** *helps* ***clarify that the problem*** *you are so passionate about is not limited to a time and place but, rather, is* ***shared*** *by researchers working on very* ***different topics****.*

6.1.2 Rewriting for Your Collective

- Now that you've found your Problem Collective, the next challenge is to write for them – or, really, ***to rewrite for them****.*
- We encourage you to try this out using *your draft research proposal* from chapter 3, but it also applies to general publications.
- This process begins with **two steps**:
  - ***Identifying*** *the* ***Field jargon*** you may currently be using (perhaps unconsciously) to *talk about your Problem*
  - ***Eliminating*** *this "insider" language from the description of your Problem* so as to make things comprehensible to people outside your Field in language they'll understand
- Rewriting for *your Problem Collective* is not as simple as it sounds. Consider these *three* ***challenges****.*
  - First, members of your Collective may ***know little to nothing*** *about your* ***subject matter****.*

    They may be entirely ignorant of your Field, and they certainly won't appreciate its *jargon* – a point we'll return to in a minute.
  - Second, ***the things that impress your Field might not impress your Collective****.*
  - Third, ***your Field's hang-ups and taboos don't concern your Collective****.* Your Field agrees that you should never question the validity of theory Y, or should always refer to subject Z with a certain nomenclature, but your Collective has no such inhibitions.

    you are likely going to have to *write for your Collective in ways that your Field doesn't demand of you.*
- What your *Collective* will *demand* is that you ***keep the problem front and center****.*
- you can ***stay focused on the problem*** you're trying to solve. It should drive the flow of your prose, the structure of your argument, and the words you use.
- *the* ***jargon*** *that makes outsiders either wince or go blank.* You can't talk that way to your Collective.

- This is one of the reasons that *finding your Problem Collective* is so important: ***to make connections**, you have to **step out** of your **Field's echo chamber**.*
- "*Pointing-while-speaking*" is essentially what all of us are doing when *we write as if **addressing only members of our Field**.*
- Insider language is of course valuable – even essential – *in certain contexts*. Used among experts, it ***eliminates redundancy*** and ***speeds the conversation***, allowing them more time to delve deeply into the more complex aspects of their work.

  You do not want a thoracic surgeon to explain every specialist term. Nor do you want the operating room to be populated by those who need things explained in lay terms.
- Insider language is, nevertheless, ***anathema*** to *the early phases* of the research process.
- *the early phases of research benefit from **slowing down** and **decompressing language**.*
- Your Collective will simply not know what your *Field-specific code words* mean. This includes not just *nouns*, but also *verbs* which – especially when used in a metaphorical sense – often beg the questions of *what* exactly is being done, and *how*.
- Replace those terms with a full description to equip your fellow Collective members with the basic information they need in order to make sense of your research orientation.
- ***Help** them to understand your questions and **recognize** you as part of the same Problem Collective.*
- *Give them the context, and they will be able to help you push your work further.*
- ***Remove acronyms, abbreviations, and shorthands*** so that a fellow Collective member can share ideas or pose questions that stress- test your assumptions and help lead you to a breakthrough.
- **Exercise 6.4 (Find and Replace All "Insider Language")** – *The **goals**: To identify language in your writing that make sense only to members of your Field and to rewrite so that you can connect with members of your Problem Collective*
  - *There is no prize for producing the cleanest page. Now is the time to find and flag as much of this insider language as possible, as doing so will help you to sharpen your thinking about how to communicate more effectively with your Collective.*
  - *Remember, the overarching goal is not just to **avoid obscuring things**, but also to demonstrate what needs to be demonstrated. Your commitment is affirmative.*

6.1.3 Welcome to Your Collective

- Note that we do *not* call this group a ***Solution Collective**.*
- Members of a Problem Collective might differ radically in how they think the problem can or should be solved.
- Proposals vary, but *a self-centered researcher can take in stride differences of opinion within their Problem Collective.*
- You can accept that not everyone in your Collective thinks like you.

- You are not looking for ***confirmation*** of your preexisting ideas. You are not looking for ***sympathy***.
- Rather, you are looking for new perspectives on the problem that motivates you.
- *Don't dwell.* A Problem Collective is a collective body of ideas, and ideas are ***mobile*** *and* ***fluid***.
- The idea is to be ***searching***. You should constantly be *leaving* (and often *returning to*) your Problem Collective, setting out into other regions, categories, time periods, and so forth.
- You might well *belong to more than one Problem Collective*, and your ***allegiances*** may ***shift*** from project to project.

6.2 How to Navigate Your Field

6.2.1 Find the Problems within Your Field

6.2.2 Read Your Field for Their Problems

6.2.3 Welcome to Your Field

6.3 How to Begin

6.3.1 Don't Worry. It's All Writing.

6.3.2 See What You Mean: Writing Draft 1

6.3.3 Perfection Is Boring

6.3.4 Welcome to Self-Centered Research

7 What's Next in Your Research Journey?