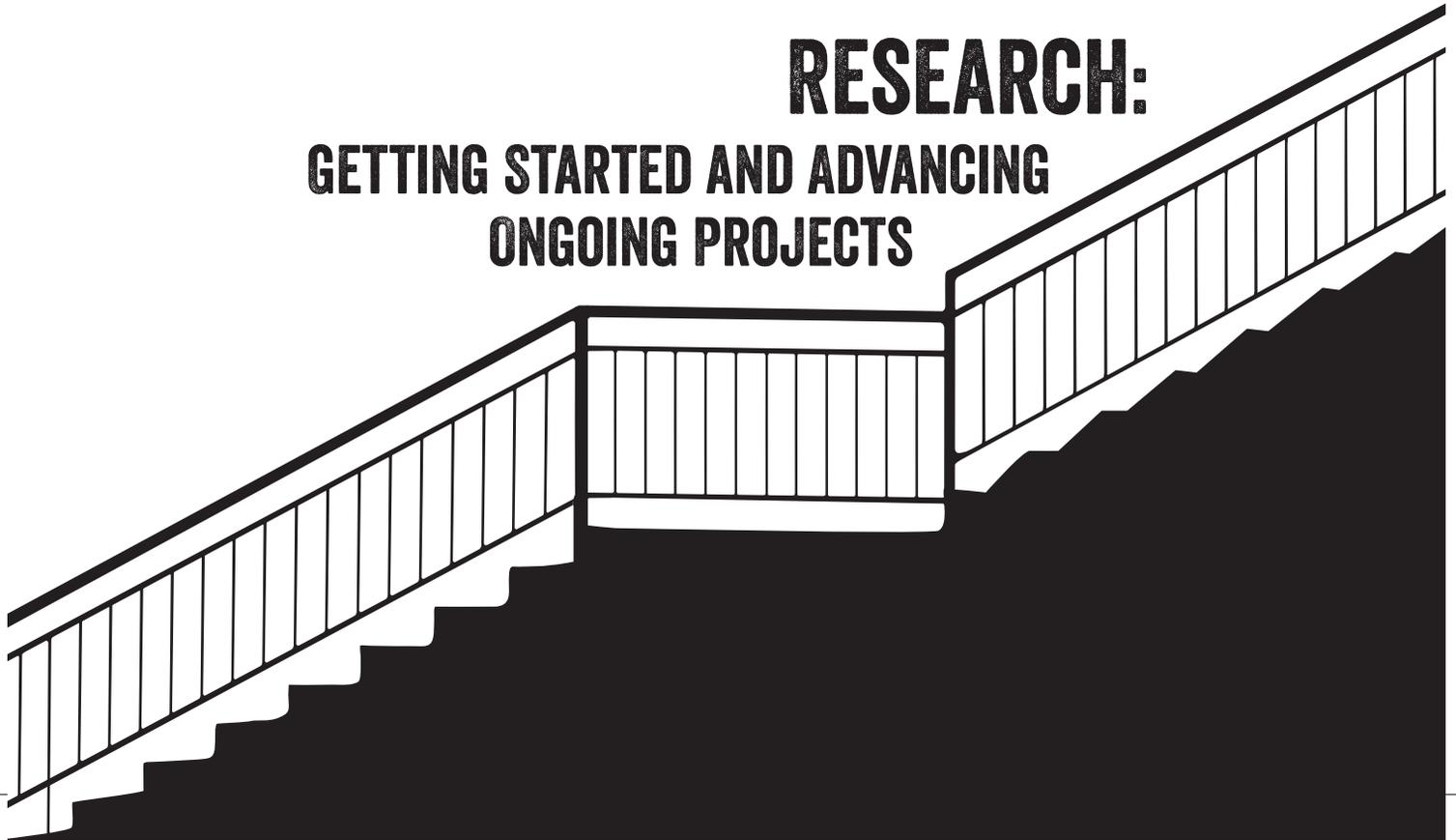


2

HOW TO CONCEPTUALIZE RESEARCH: GETTING STARTED AND ADVANCING ONGOING PROJECTS



Learning objectives

By the end of this chapter you will have the tools to:

- Identify and conceptualize a research topic
 - Formulate a research problem
 - Anticipate potential 'Who cares?' questions
-

Chapter summary

Conceptualization, the art and practice of discovery, is the first and some may argue the most difficult part of research. This chapter will provide researchers with strategies for conceptualizing qualitative projects, including how to use the literature effectively and how to formulate a research question.

INTRODUCTION

We tend to gloss over 'conceptualization'. Conceptualization is the process of not only selecting a topic, but formulating a defensible and researchable research problem; it is more than simply generating a list of interesting topics such as academic achievement gaps or homelessness. If you jump from a topic to data collection, you will likely end up with random bits of information that are of little use to the researcher or your intended audience. Such projects not only tend to lack analytical focus, but will be plagued by the challenges associated with the dreaded 'Who cares?'. Good conceptualization involves moving from a general topic to a clear research problem.

This chapter outlines concrete tools for conceptualization. We present them as steps, but fully acknowledge that in reality research happens in a non-linear fashion. We also note that some approaches are more exploratory, particularly at the beginning stages of a project. However, whether you start off with a perfectly good research question or not, you will eventually need to complete every step.

1. **Step One:** What is the topic? The first step of any project is to determine what you want to study.
2. **Step Two:** What is my problem? Why should anyone care about my problem? You must then establish the problem your project hopes to solve, including filling in a gap or extending the literature in a new and exciting direction.

STEP ONE OF CONCEPTUALIZATION: WHAT IS MY TOPIC?

the common problem among students is the feeling that one has nothing to say ... you find the huge variety of things that *could* be said almost as overwhelming as the huge diversity of things that *have been* said. (Abbott, 2004: 85)

By design, researchers are deeply curious about the social world. If you are lucky, you may start a project with a topic that is inspired by your discipline, subfield, or event such as the Occupy Wall Street movement. You may even have some general questions in mind such as identifying the aspects of the Occupy Wall Street movement that were more or less successful, or whether it constituted a social movement in the first place. In such cases, you need the tools presented in this chapter to prevent you from relying on a particular lens simply out of habit. So if your tried and true method is to view such a movement through the eyes of the participants or as a Marxist, considering an alternative approach may help you forge an exciting and less travelled intellectual pathway (Abbott, 2004: 86).

Many budding researchers, however, are interested in many topics that may or may not be related, such as female body builders and cults, or a broad area, such as children's afterschool activities. Yet decisions (and sacrifices) have to be made in the interest of developing a coherent research design. Initially, pinning down a topic is useful for guiding researchers toward the literature and some preliminary sources of data. As we discuss below, some initial 'digging' can provide you with much needed background and inspiration. This part of conceptualization is an important *first*, but definitely not last, step toward developing an informative and interesting research project. This ground work not only saves time and cuts down on mistakes, it will undoubtedly come in handy time and time again, whether writing your literature review or defending your project at a proposal defence or to a journal reviewer.

In Table 2.1 we present a toolkit for generating ideas. You should not get too bogged down about which tool is better or whether you are executing any one of the options 'perfectly'; instead, see these exercises as brainstorming tools. You may also find some tools more or less useful than others depending on your approach.

We present five key sources for inspiration that are divided two groups:

- a) Data and theory driven
- b) Researcher driven

Data and theory driven

Data driven conceptualization includes both secondary and primary sources. We discuss secondary sources first since they will likely be the most accessible option, particularly for more novice researchers. Secondary sources are generally one step removed from the original event or people and include published academic and professional articles, commonly referred to as 'the literature'. Primary sources include materials that are produced by, for, or about the people, group, organization or event under study by persons who have direct and intimate knowledge or experiences. We also discuss the possibility of conducting some preliminary data collection.

Table 2.1 What is my topic? Sources of inspiration

	Type	Example
a) Data and theory driven	1) Secondary sources	Journal articles Academic or professional books Research reports
	2) Primary sources	Online materials (e.g., blogs) Websites Government documents or public records Archival materials Brochures, reports, posters Diaries, letters Media (online, newspapers, magazines and TV) Pictures or videos Furniture, statues, clothing Music, poetry, art Maps Transcripts Academic and professional articles and reports that are used as primary sources of data
	3) Primary: Preliminary raw data that you collect or produce	Pilot project
b) Researcher driven	4) Mapping exercises	Mind map Concept map Literature map
	5) Abbott's (2004) 'Lists'	Aristotle's four causes

Secondary sources: The literature

The literature will be your first and arguably best friend in the development of a research project. The literature includes three main sources: a) academic journal articles; b) academic or professional books; and c) research reports. You will obviously need to use these sources to construct a literature review. However, in this section, we discuss how you can use the literature as a source of inspiration.

Academic journal articles

The first and most common source is published journal articles. These articles are peer reviewed and can be accessed through a variety of sources, including JSTOR and Scholars Portal. The term 'peer reviewed' means that the articles have been reviewed usually by

two or three experts, and have likely been screened by the editor of the journal. While journals vary in terms of the degree to which articles are scrutinized, and in many cases rejected, the process provides a measure of quality control. If you are unsure where to start, ask experts in your field (e.g., your supervisor) or a librarian at your institution for the most appropriate sources. The journals supported by your discipline's professional association(s) are another great starting place. In sociology for example, the American Sociological Association, Canadian Sociological Association and the European Sociological Association all host a variety of high quality academic journals.

There are three main types of academic journal articles:

- **Research articles:** Research articles use primary (e.g., interviews conducted by the author) or secondary (e.g., archival materials) sources of data to advance a particular original idea, argument or theory.
- **Theoretical articles:** Rather than relying on primary or secondary data (though the author may refer to such data) theoretical articles attempt to advance or critique a particular theoretical concept or framework, or make an original theoretical contribution to the literature.
- **State of the field or review articles:** This type of article reviews a large body of research and theoretical articles. Review articles articulate key arguments, sources of data, theories and debates on a particular topic. They are a wonderful source, particularly for researchers who are newer to a particular area. Most disciplines also have journals that are specifically devoted to publishing review articles. *Annual Review of Sociology*, *Annual Review of Economics* and *Annual Review of Political Science* are a few examples.



Quick tip: How to search for academic journal articles

Searching for articles on your topic is part art, part science. To 'strike gold', you will need to experiment with different terms and combinations. Some of these terms will be obvious (e.g., layperson terms), and others will be added once you become familiar with terms that are used in the literature. Below we present an example of searches from a project on school shootings. Start with the most obvious search terms (e.g., school shootings), then separate key terms on separate rows of the search engines (e.g., 'school' on row one and 'shooting' on row two). Use quotation marks to keep key works together (e.g., 'school violence'); if not some search engines will simultaneously search for these terms separately (e.g., you may end up with thousands of articles containing the word 'school' and thousands of articles containing the word 'violence' that have nothing to do with school shootings). In some cases you will be able to search on a key event, person or organization that is related to your topic (e.g., 'Sandy Hook' or 'Columbine', two famous school shootings). Once you are familiar with the literature, you may come across alternative terms related to your topic. In the case of school shootings some authors have referred to them as 'rampage shootings' or 'organizational deviance'. You may also add in other terms that according to the literature are related to school shootings (e.g., bullying), but recognize that these searches will likely yield many articles that have nothing to do with your core topic.

Example: Search terms

Key	Combination	Key events, people or organizations
'School shootings'	'School' AND 'shootings'	'Sandy Hook'
'School shooters'	'School' AND 'shooters'	'Columbine'
'School violence'	'School' AND 'violence'	

Academic or professional books

The literature also includes academic or professional books on your topic. Sources include, but are not limited to, academic presses.

There are four main types of books:

- **Academic or scholarly books:** Scholarly books include original research and 'state of the field' chapters that marshal a variety of data to frame a particular issue or make an original contribution. Most of these books are published by academic presses (e.g., NYU Press) or foundations that support scholarly work (e.g., Russell Sage Foundation).
- **Popular original works:** Popular original works target a wider audience, but may still be authored by experts. More novice researchers should tread a bit more carefully, since they will likely have fewer tools to evaluate the relative quality of the argument and any data that the author used. However, there are many wonderful examples of popular books that are both high quality and accessible. Venkatesh's (2008) *Gang Leader for a Day* is a perfect example. His book is popular in its own right, and is featured in the wildly successful *Freakonomics* (Levitt and Dubner, 2009). Yet, at the same time the book is grounded in years of rich field research.
- **Original or reprinted edited collections:** Edited collections can provide a different kind of breadth by marshalling chapters from a variety of authors and perspectives on a particular topic. Edited collections can include a series of original contributions such as previously unpublished data, concepts, frameworks or theories. They can also include reprinted material either in its entirety (e.g., one chapter that has been reprinted from a previously published book or article) or a summary of an original contribution.
- **Encyclopaedias:** Unlike a traditional encyclopaedia, scholarly encyclopaedias are typically produced for a particular discipline or sub-field (e.g., Health), or around a particular theme (e.g., Social Welfare). These sources will not provide you with a comprehensive examination of any one topic, but will provide you with a summary of hundreds of key terms, concepts, theories or methods, depending on the focus of the encyclopaedia. Such sources may help you formulate a handful of working definitions that you can use when discussing your key terms or concepts. Most also include cross-references and suggestions for further reading. *The SAGE Encyclopedia of Qualitative Research Methods* (Given, 2008), *The Encyclopedia of Social Networks* (Barnett, 2011) and *The Encyclopedia of Housing* (Carswell, 2012) are just a few examples.



Quick tip: So many books, so little time ...

Despite the potential benefits, if you are on a tight timeline (e.g., a proposal deadline) you may need to initially limit the number of books you read since one book may take as much time as reading five or six articles on your topic. We are certainly not trying to discourage you from reading books on your topic, particularly classic, well-cited or award winning books! We are just noting that if you have a tight timeline, decisions will have to be made. To help you make such decisions, there are several sources to help you generate a list of 'must read' books:

- **Book reviews:** Read book reviews published in academic journals. There are also academic journals specifically devoted to book reviews. *Contemporary Sociology* is just one example. You should never take any one review as the 'final word' unless of course the reviewer is someone you trust. However, a good book review will provide you with a basic summary of the book and constructive criticism that is grounded within the larger literature.
- **Well-cited books:** Read the handful of books that seem to be continuously cited by known experts on your topic, including books that are controversial or that have received a lot of media attention. Reviewing the books (and journal articles for that matter) that are cited in the academic literature is a good place to start.
- **Recognized books:** Read books on your topic that have been recognized in some special way (e.g., an award by your discipline's professional association). You should also consider books on your topic that have been featured at recent conferences (e.g., author meets critic).

Professional reports

Professional reports include published research, theory, review and working papers. Most government agencies, think tanks, professional associations, advocacy groups or arms-length research consortiums produce professional reports that are widely available to the public online. Examples of such government bodies or organizations include UNESCO, WHO, the US Census Bureau, and the Ontario Ministry of Education. All of these agencies post online research articles, executive summaries or press releases that are chock full of original and secondary data, policy recommendations, and literature reviews.

Now what? How to use the literature to conceptualize

Key takeaways

- First identify key theories, terminologies, concepts, methods, data and interpretations presented in the literature.
 - Second identify what is not known, missing or problematic in the literature.
 - Unless you are already very well versed in the literature, your initial review will require a lot of time.
 - An ongoing 'small-c' critical examination of the literature is essential.
-

The literature, when used properly, can be a powerful conceptualization tool and can help you identify theories, terminologies or concepts, methods, or data (Maxwell, 2005: 55).

In Table 2.2 we present key questions to get you thinking about what is known in the literature (column one). Once you have identified the key questions, theories and concepts that dominate the literature on your topic, you can start to identify what is not known, problematic or missing (column two) in a manner that will not only aid in conceptualization, but is critical for developing an informed literature review. In short, these are questions you will need to answer at some point along your journey. Addressing these questions early on has additional benefits, most notably when you are ready to start your literature review. As Maxwell (2013: 40) cautions, a literature review is a ‘dangerously misleading term’. Literature reviews that simply summarize or provide an overview of the existing literature tend to be descriptive or merely parrot what others have already said (e.g., repeating the limitations of a particular theory or method). This approach also tends to be only superficially connected to *your* project and research questions. By asking and answering the questions in Table 2.2, you will be in good shape to start to develop an original conceptual framework.

Steps

1. Search the literature on your topic (see sources above).
2. First identify key theories, terminologies, concepts, methods, data and interpretations presented in the literature. Second identify what is not known, missing or problematic in the literature (see Table 2.2).
3. Verify that your rendering of the literature is correct. Speak to your supervisor and committee members. Return to your library search engines (e.g., JSTOR) and plug in key terms that relate to what you have identified as unknown, missing or problematic just to be sure that you have not missed an important article or stream of the literature.
4. Discussed in detail below, start to narrow in on the one or two ‘holes’ that you have identified to construct your research problem and research questions.

Table 2.2 How to use the literature to conceptualize

What is known?	What is not known, problematic or missing?
What questions have been asked about my topic?	<ul style="list-style-type: none"> • What questions have not been asked on my topic? • Is there a time, geography, or location dimension to these questions and if so, what would happen if I altered it? • What would happen if I turned dominant questions around? (e.g., rather than ask why there are so many high school drop-outs, ask why there are not more) • What if I turned positive questions into negative questions (or negative into positive)? (e.g., so rather than asking how drop-outs and graduates are different, ask how they are not different)

(Continued)

Table 2.2 (Continued)

What is known?	What is not known, problematic or missing?
What major theories have been used to examine my topic?	<ul style="list-style-type: none"> • Do these theories adequately capture the phenomenon under study? • Are there other possible theories that should be considered?
What major concepts have been used to examine my topic?	<ul style="list-style-type: none"> • Do these concepts adequately capture the phenomenon under study? • Are there other possible concepts that should be considered?
How have concepts been defined?	<ul style="list-style-type: none"> • Are there other possible definitions? • Are there problems with current definitions?
How have they been measured?	<ul style="list-style-type: none"> • Are there other possible ways concepts could have been measured? • Are there problems with how concepts have been measured?
What kinds of data have been used to examine my topic?	<ul style="list-style-type: none"> • Are there other possible sources of data? • Are there problems with the data that have been used?
What concepts, ideas or relationships tend to be in the foreground and background?	<ul style="list-style-type: none"> • Should a particular concept be given more or less weight? • What would happen if I switched the foreground and background?
What are the dominant interpretations or findings?	<ul style="list-style-type: none"> • Do the dominant interpretations make sense? • Is there a reasonable connection between the data and interpretations?
What relationships have been examined?	<ul style="list-style-type: none"> • Are there other relationships that could be examined? • Are the relationships currently under study still the most important, or should we consider new ones?
What has been the context?	<ul style="list-style-type: none"> • Is the context of my study the same? • Is the context of my study different? • Has the context changed?
What are the major debates on my topic?	<ul style="list-style-type: none"> • Have these debates limited the scholarship on my topic in a particular manner? • Does one side appear to have more credibility? • Do the debates focus on the data, theories, interpretations or some combination of the three?
How have others justified their study or its contributions?	<ul style="list-style-type: none"> • Can I use their rationales (with or without some tweaking) to justify my study and its contributions?
What do others have to say?	<ul style="list-style-type: none"> • Do their findings confirm or disconfirm research from my discipline? • What can I learn or take away from their concepts, data, or interpretations?
What frameworks, theories or data am I most comfortable using to study my topic?	<ul style="list-style-type: none"> • What alternative frameworks, theories or data are available on my topic? • How would critics of my approach, or scholars using alternative frameworks, theories or data examine my topic?

Some researchers may warn you about the dangers of ‘ideological hegemony’ generated from examining the existing literature too closely (Becker, 1986). And it is true, if you stick only to ‘what is known’ you may limit your ability to see your topic in a new light.

Importantly, if you cannot demonstrate how your study addresses an *unanswered* problem in the literature, then your study will be of little value to your target audience.

However, we argue that a comprehensive understanding and an *ongoing* ‘small-c’ critical examination of the existing literature will allow you to more confidently represent ‘what is not known, problematic or missing’ in a manner that *will* increase your chances of ‘inspect[ing] competing ways of talking about the same subject matter’ (Becker, 1986: 149). Equally important is that using the literature in the spirit of conceptualization does not marry a researcher to a particular approach since it is more of a question of what or how you use the literature, rather than whether you should read the literature in the first place.

Primary: Using raw data

Key takeaways

- Examine raw data produced by, for or about the group, organization or event of interest.
 - Consider how these data or presentation of the literature may be used as data in their own right.
 - Consider conducting a small pilot project, even at very early stages of the project.
-

The use of primary sources of data is not limited to the ‘data collection’ phase of a project. There are two main sources of primary data that are worth considering for conceptualization purposes. The first source is raw data produced by, for or about the group, organization or event of interest. Data include online materials, including websites, textbooks, archival materials such as diaries or pictures, online videos, media reports and magazines. Beyond reviewing primary data for conceptualization purposes, you can also consider how these data may capture important dimensions of your topic and be used as data in their own right. Meyer et al. (2010), for example, mapped the growing presence of human rights issues in social science textbooks. Similarly, Wrigley (1989) conducted a content analysis of over 1,000 articles from popular literature targeted at parents to understand changing attitudes about children’s development.

You may also want to consider using academic and professional reports as a primary source of data. Mizruchi and Fein (1999), for example, reviewed key journal articles to examine the social construction of knowledge. Similarly, Colquitt and Zapata-Phelan (2007) examined five decades of articles published in a highly influential journal, *The Academy of Management Journal*, to develop a taxonomy of the theoretical contributions to the field.

The second source of primary data is raw data that you collect or produce, sometimes referred to as a ‘pilot project’. Some preliminary fieldwork, interviews or analysis of the materials is an excellent way to get your feet wet and to work out the direction and focus of your project. Pilot projects are not only incredibly important to work out key data collection instruments (e.g., an interview schedule) but can fundamentally shape the scope and direction of a project. You will need to consider this option with your institution’s research ethics board in mind.

Researcher driven

Key takeaway

- Use brainstorming exercises at the early stages of conceptualization to articulate what is known about a topic, and to identify relationships, processes, concepts or missing information.
-

Researcher driven sources includes a variety of brainstorming exercises that you develop to generate ideas. Below we present two such ideas, but there are certainly other strategies available.

Early mapping: Mind, concept and literature techniques

'Mapping' is routinely used in qualitative research, particularly at the beginning stages of data analysis. Mapping is a 'graphical tool for organizing and representing knowledge' (Wheeldon, 2010: 90). Such visual aids can serve as a powerful tool at many stages of a project by allowing (or forcing) researchers to classify and organize information in manageable chunks. Faced with mountains of data, including interview transcripts, field notes, documents or pictures and videos, researchers use this technique to sketch-out relationships, sense-making or organizational processes, and the linkage between data and concept or theoretical ideas. Importantly, mapping allows researchers to embed these understandings within a broader contextual framework. Mapping can also encourage researchers to take a 'reflexive approach to how we are classifying' (Hart, 1998: 143). Ideally, mapping requires researchers to think about their classification schemes, and the underlying logic that guides their decision-making.

For our purposes in this chapter, we articulate the benefits of what we refer to as 'early mapping' techniques for conceptualization. In particular, early mapping can also be used to develop a research project by allowing researchers to articulate what is known about the topic, and theorize possible or preliminary relationships, processes or concepts (Daley, 2004; Novak and Gowan, 1984; Novak and Cañas, 2006). Below, we present three kinds of mapping techniques: Mind and Concept Mapping and Literature Mapping (Table 2.3).

Mind and concept mapping

Though similar, researchers make a distinction between 'mind' and 'concept' mapping techniques. Mind maps are usually organized around one central idea, concept or theme, and tend to be more informal and flexible (Buzan and Buzan, 2000). Concept mapping by contrast is more structured, and often includes multiple ideas, concepts or themes as well as people, groups or organizations. Concept maps are developed with a good understanding of the context in which they will be used.

We caution against getting too bogged down about which method is better or whether you are doing either one 'perfectly' at the conceptualization stage. There are entire books

written about doing both, and that detail various ways to get the job done (e.g., Kane and Trochim, 2007). We see it as an exercise in getting the pieces of the puzzle down on paper, developing a good grasp on the key dimensions related to your project, and thinking about possible puzzles that still need to be answered (Table 2.3). You will likely need to rework your mind or concept maps several times as your ideas develop.

Mind maps

Mind maps are perfect for researchers who are newer to a topic. Mind maps allow researchers to get a handle on the central characteristics, themes or concepts.

Mind maps have the following characteristics:

- Visual representation of key themes, concepts, ideas, organizations, people, units or theories.
- Built around one central idea or theme, as a flow chart or as a 'tree' diagram (Miles and Huberman, 1994).
- The use of simple lines to articulate connections.
- The potential to use different shapes to symbolize different components (e.g., using squares for organizations; circles for people) or different emphases (e.g., using squares for components directly related to the core; circles for components on the periphery).
- Flexible and less structured.

Concept maps

Concept maps are suitable for researchers who have a reasonable grasp of the literature or topic under study. Concept maps are more structured and multifaceted, and based on an understanding of the context that they will be used in (Novak and Cañas, 2006). Concept mapping includes structuring statements, words, and people, groups or organizations based on either what is known or theorized about the topic of interest. Concept maps also include words, symbols and shapes to explain the nature or strength of relationships between two or more units. Rather than flowing from one concept or idea, concept maps represent multiple start points which may or may not be related to every other unit.

Concept maps have the following characteristics (Figure 2.1):

- A multi-hierarchical representation of information. Hierarchies may be based on relative importance, a process, or moving from the general to the specific.
- 'Information' may include not only key ideas, concepts, characteristics and people, groups or organizations, but also examples.
- The use of boxes, circles or other shapes to differentiate various kinds of information (e.g., circles to represent theories and boxes to represent concepts).
- The use of cross-links which include simple lines, directional arrows or circles to articulate a relationship between the various characteristics, outcomes and concepts/ideas or units.
- The use of linking words (e.g., more, less), shapes (e.g., squares for countries, circles for economic policies) or symbols (e.g., %, +) to explain or elaborate on a particular relationship.
- The structure of the concept map and the nature of the relationships are context dependent.

Table 2.3 General steps to mind mapping and concept mapping

Steps	Example
<p>1 Start with a central theme</p> <p>Write down all of the characteristics, people, organizations and so forth associated with the central theme</p>	<p>You are interested in 'school readiness', a term used to describe children's literacy, numeracy and socio-emotional development just before they start school. The research that you have reviewed documents the antecedents of school readiness, and its consequences to children's academic achievement.</p> <p>You start to develop a list that you rework into several categories or chunks of information:</p> <p><i>Antecedents of school readiness:</i></p> <p>Family socioeconomic status - parent education; parent occupation</p> <p>Parent involvement/contact</p> <p>Parenting philosophy</p> <p>Social, family or other support/networks</p> <p>Neighbourhood conditions (e.g., housing, crime rates)</p> <p>Child's cognitive, physical or mental health</p> <p>Parents' cognitive, physical or mental health</p> <p><i>Shorter term outcomes:</i></p> <p>Transitions to schooling</p> <p>Pre-literacy and pre-numeracy skills</p> <p>Social skills</p> <p>Ability to concentrate or follow direction, routines</p> <p><i>Shorter term interventions:</i></p> <p>Targeted programmes (e.g., pre- and post-kindergarten school readiness, breakfast programmes)</p> <p>Social, financial and education support for parents</p> <p><i>Longer term outcomes:</i></p> <p>Grades</p> <p>Self-esteem</p> <p>School engagement</p> <p>Graduation or drop-out rates</p> <p>Postsecondary outcomes</p> <p>Labour market outcomes</p> <p>Physical or mental health</p> <p>Political/community engagement</p>
<p>2 Mind maps start with a central concept</p>	<p>Based on your literature review, start to think about all the characteristics, outcomes or concepts/ideas that help explain 'school readiness' and its consequences</p>

(Continued)

Table 2.3 (Continued)

Steps	Example
Concept maps start off with several concepts, ideas and so forth	Based on your literature review, start to think <i>across the spectrum</i> of school readiness. If school readiness is an outcome of family and neighbourhood characteristics and social support for example, what other outcomes (beside school readiness) are associated with these conditions (e.g., children's mental and physical health)?
3 Draw the connections among the elements Mind maps build out from one master concept (e.g., school readiness)	Building out from school readiness, sketch out the various explanations and outcomes that are associated with it. Make connections between the various characteristics, outcomes or other concepts/ideas to demonstrate how they relate to one another (e.g., how school readiness is related to not only poor kindergarten outcomes but also postsecondary chances)
Concept maps have multiple key concepts, each of which is associated with a variety of related ideas or themes that may or may not be directly connected to one another	Start to build characteristics, ideas, people or organizations around each concept. Then draw lines to show how each concept is related to one another, and how ideas, people, organizations and so forth are related (or not) across concepts
4 Now that you have a visual representation of the major elements and relationships associated with your central concept, you can review your map: What is not known, problematic or missing? Answering the 'What is not known, problematic or missing' question will help you not only formulate a research project, but will crystallize the research problem you hope to solve	Consider whether using shapes to differentiate types of information or kinds of things represented on your concept map will help the conceptualization process (e.g., squares for people, ovals for organizations) Add layers to your concept map including words (e.g., more, less) or symbols about the strength or direction of relationships (e.g., arrows, + or - signs) Are school programmes aimed to address school readiness sufficiently developed? Have they been sufficiently evaluated, or promoted on the basis of limited support? Do the concepts and theories used to explain school readiness adequately capture the multi-dimensional nature of the problem? Or perhaps you find that the relationship between parent education and school readiness has been sufficiently researched, but few have looked at how fostering early home-school connections may ameliorate school readiness disparities

Literature mapping

Similar to mind and concept mapping, in literature mapping the intention is to generate a visual representation. Rather than focusing on key concepts, the point is to map out the literature by theory, methods and data, time period, context, interpretation or emphases, or geography. The goal is to identify similarities, connections, intersections, differences, and even holes in the literature (Table 2.4). These maps can be immensely useful for situating your study within the literature as well as highlighting one or two representative articles,

books or reports (Creswell, 2003: 39). Beyond conceptualization, including a literature map (either in the body or as an appendix) in a thesis, article or book can be a very effective tool for all the reasons noted above.

Literature maps have the following characteristics:

- Organized around one central dimension of the literature, several dimensions of the literature or as a multi-hierarchical representation of the literature.
- Literature may be organized in a variety of ways, including by theory or time period.
- Literature may be represented in a manner similar to a mind or concept map or as a chart.
- Literature maps in the spirit of mind or concept maps can use boxes, circles or other shapes to differentiate various kinds of information.
- Literature maps in the spirit of mind or concept maps will use cross-links which include simple lines, directional arrows or circles to articulate a relationship between the various characteristics, outcomes and concepts/ideas or units.

In Figure 2.2 we present an example of a literature map. The example is a thematic literature map and represents a handful of themes in the literature related to the antecedents of school readiness. We could have just as easily organized it by how the literature has developed over time, theories, methods or data.

For the purpose of this exercise, we have kept the content of these examples very simple, but literature maps can become quite rich and complex as they develop over time. Each one of our categories, for example, could be easily decomposed into themes in their own right.

Major Theme	Description	Representative Literature*
Family Conditions	Parental education Parental occupation Parental income Parental mental or physical health Social support	Smith and Jones (2011) Collins (2008) Farhaz, Davis and Moral (2012) Fabb, Cooke and Jacobs (2010) Marion and Saab (2007)
Children	Cognitive and language development Emotional and social development	Lambert, Holland and Davies (2009) Sampson and Robert (2013)
Pre-school Experiences	Construction of time Formal learning opportunities (e.g., preschool) Informal learning opportunities (e.g., literacy enhancing activities at home)	Phillips (2007) Brint, Sutor and Chris (2013) Milne and Later (2005)
Neighbourhood Conditions	Social support Availability of resources Transportation Conditions Housing conditions Crime	Parison and Axinn (2005) Xie and Lyndon (2011) *fictional names

Figure 2.2 Thematic literature map: Antecedents of school readiness

Table 2.4 General steps to a literature map

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- 1 Start to categorize the literature you have found around some broad organizing logic (e.g., by theory, method, time period, etc.)
 - 2 Label each box or row based on your organizing logic (e.g., years 1850-1900)
 - 3 Specify major publications. You may want to add a column that provides some kind of description or detail
 - 4 Consider adding additional layers or rows/columns to include 'sub-sub-topics'
 - 5 In the case of flow chart or 'tree' style literature maps, use lines to connect or signify a shortcoming, strength, or synergy between two or more groupings of the literature
-

Abbott's lists

In *Methods of Discovery* (2004), Abbott outlines several heuristics or ways to find a researchable topic in the social sciences. One of his suggestions includes using topical lists. We borrow from one of Abbott's lists, Aristotle's four causes, though you may certainly think of others, including the very simple '5 W' list – the who, what, why, where and when – on a particular topic. As Abbott notes, the point of this kind of exercise is to make these lists useful, not to quibble over whether the concept or list is exactly as the original author intended.

Aristotle's four causes

Fundamentally, Aristotle's four causes are about answering 'Why?' questions. Let's return to the Occupy Wall Street example. If you are interested in why the Occupy Wall Street movement failed to generate meaningful changes to the banking system you could play around with how material, formal or structural, effective or final causes contributed to the Occupy Wall Street movement (Table 2.5).

Table 2.5 Aristotle's four causes

Definition	Example: Occupy Wall Street
<p><i>Material Causes</i> refer to the social, physical or material matter that contributed to the final outcome</p> <p>Aristotle's examples of material causes include how bronze (the material) is the 'cause' of a statue</p>	<p>Who are the supporters and critics of the Occupy Wall Street movement? What qualities or kinds of people make up each group? Does the Occupy Movement attract a particular kind of person or persons?</p>
<p><i>Formal Causes</i> are not about the kinds of people or substance of a particular thing, but rather its social structure or pattern</p>	<p>Does the Occupy Wall Street movement have a particular structural make-up? And was this structural make-up similar to or different from other kinds of social movements?</p>
<p><i>Effective Causes</i> refer to the primary driver, reason or source of a particular change</p>	<p>How do members describe the early development of the Occupy Wall Street movement?</p>
<p><i>Final Causes</i> refer to the ultimate goals or purpose for a particular thing</p>	<p>According to members, what are the goals of the Occupy Wall Street movement?</p>

Applied to your own topic of interest, Aristotle's four causes can help researchers generate interesting topics. Perhaps most importantly for seasoned researchers, it can help break out of old habits or ways of thinking – many of which you are probably not aware of. Using this kind of list may help you identify your comfort zone, and push you to think of your topic in less conventional ways.

STEP TWO OF CONCEPTUALIZATION: WHAT IS MY RESEARCH PROBLEM?

Key takeaways

- Identify the intended audience and desired contribution.
 - Articulate the foundation of your research problem and address the inherent limitations of that approach.
-

Before we identify what a research problem is, it is instructive to identify what it is not. The 'problem' we are referring to has nothing to do with the social justice dimension of your project. So simply stating that a financial crisis created a lot of heartache does not sufficiently justify your project. A research problem is also not the same as your research questions. Research questions are specific and focused inquires that *derive* from the research problem, not the other way around.

Instead, the research problem articulates the gap in the literature or conceptual and analytical shortcoming that you plan on addressing in your project. Articulating the research problem will speak directly to how you will eventually craft your purpose statement since it similarly forces you to articulate 'why you want to do the study and what you intend to accomplish' (Locke et al., 2000). Take a look at most high quality books and articles on your topic. Most, if not all, of them will begin with a summary of the literature, including articulating what is missing or deficient. These articles then discuss how their research makes up for one or more of these limitations. Why? Put simply, if previous research sufficiently addresses the questions or issues you are interested in, then why on earth do we need another study? Fortunately for you, this is rarely the case.

What is my intention?

To answer the 'What is my problem?' question, researchers must first answer the 'What is my intention?' question. The nature of the problem formulation will be very much shaped by the kind of contribution you hope to make, a particular approach to research (e.g. more inductive) and your intended audience. You have to seriously evaluate whether your intended audience is really interested in what you eventually hope to 'sell'. Are you hoping

to contribute to the academic or professional literature? Evaluate a policy or programme? Contribute to social reform? And what does your intended audience already know or want to know (Booth et al., 2008: 26)? Only you can answer these questions, but we have provided guidelines in Table 2.6 to start formulating your research intention.

Steps to using the ‘What is my intention?’ table:

1. Identify your target audience. Your initial target audience will determine the range of early problem formation strategies.
2. Based on your review of relevant literature and other resources, identify a research problem based on what your specific audience already knows and wants to know.
3. Articulate your specific research intention in a way that aligns with your target audience and research problem formation. Ask yourself: Does my research problem formation and potential contribution make sense given my target audience?

Table 2.6 What is my intention?

Possible audience(s)	Possible research problem formation	Possible contributions
<ul style="list-style-type: none"> • Academics • Professionals 	Are interested in building ... <ul style="list-style-type: none"> • Theoretical frameworks • Concepts • Empirical data • Evaluation 	That contributes to ... <ul style="list-style-type: none"> • Scholarly or professional literature • Programme evaluation • Policy reform • Social reform • Providing new factual information • Solving a practical problem
<ul style="list-style-type: none"> • Professionals • Policy makers • Group under study • Community group 	Are interested in building ... <ul style="list-style-type: none"> • Concepts • Empirical data • Evaluation 	That contributes to ... <ul style="list-style-type: none"> • Policy reform • Social reform • Providing new factual information • Solving a practical problem
<ul style="list-style-type: none"> • General public • Popular media 	Are interested in building ... <ul style="list-style-type: none"> • Concepts • Empirical data • Evaluation 	That contributes to ... <ul style="list-style-type: none"> • Policy reform • Social reform • Providing new factual information • Solving practical problems • Popular discourse (e.g., entertainment)

At the beginning stages of any project, it is hard to predict the potential impact of your work. If you are lucky, you may be pleasantly surprised when people beyond your initial target audience like your work, including researchers from other disciplines or the media. Additionally, as you become a more experienced researcher and writer, you will learn how to package your research in a variety of ways. So starting off with a clear target audience, at least in the interim, certainly does not limit a researcher from disseminating his/her findings more widely. However, if you are less experienced, articulating your intended audience and purpose will improve your chances of crafting a project that meets your more immediate

research goals, and inform how you write up or present your research. If your primary intention is to affect a policy, then writing up your findings in a manner that relies too heavily on specialized terminology or complicated theories from your discipline will be of little use.



Quick tip: Ask yourself, are all three in alignment?

Use Table 2.6 to answer the following question by linking your audience, your initial problem formation, your intended contribution:

My project targets _____ (e.g., academics) and builds _____ (e.g., X theory). It contributes to the _____ (e.g., literature) by _____ (e.g., demonstrating that the theory may not apply to rural settings as previously thought).

Are all three in alignment? If, for example, your intended audience is a community group, then focusing your problem formation on some esoteric theoretical flaw makes little sense. As we note, as you become more experienced you will be able to repackage your research to reach a variety of audiences, but you should initially have a very clear understanding of your main target. Recognize that each audience has a limited capacity (or desire) for certain kinds of problem formations and contributions.

What is my research problem?

Once you have identified your intention and immediate target audience, the question of how you plan on connecting and contributing to that group looms large. We first discuss five common ways researchers can articulate their research problem. Strengthening your research problem rationale also forces you to orient your project and address gaps in the literature; it may also connect you to a potential research design. However, depending on the approach to qualitative research, the problem formation may be developed at different stages of the project. We do not seek to impose a specific timeline on when the research problem occurs, but rather stress the importance of evolving your research problem formation in a manner that speaks to your audience and to your approach.

The scholarship of me

Key takeaways

- The Scholarship of Me occurs when the author is emotionally invested in the topic based on his/her personal experience or identity.
 - The key challenge is to communicate the wider significance of the topic. A personal problem is not the same as a research problem unless you are able to communicate its wider scholarly significance.
-

Many of us are inspired by personal circumstances or experiences such as a family member's occupation, a difficult illness or an event such as a divorce. We are also motivated by practical problems such as how we can prevent another Boston Marathon bombing (e.g., Booth et al., 2008). Yet a personal or practical problem is not the same as a researchable problem that will be of interest to your audience. *Instead, you must build on your inspiration and articulate the conceptual holes in the literature on that topic.* A question about why your parents divorced is completely uninteresting from a research standpoint. However, transforming that interest into a project that examines the antecedents of divorce has the potential to produce a stellar project. Inspired by her own breakup, Diane Vaughan (1986) for example, illustrated how the process of breaking up is a fairly standard and patterned process. She was able to transform the question of 'why did *my* relationship break down' into a question about how relationships 'uncouple' *more generally* (see also Khan, 2012).

To summarize, a personal problem is not the same as a *research problem* unless you are able to communicate its wider *scholarly significance* beyond your personal interests or experiences. In short, you must find a way to transform a 'scholarship of me' project into 'scholarship' in its own right.

The plus one

Key takeaways

- The Plus One approach adds a new case, group or variable.
 - The key challenge is to demonstrate that the new addition makes a meaningful extension to the literature.
-

Most of us engage in what Kuhn (1962) referred to as 'normal science', an addition or extension to the existing literature. The plus one type of project adds a new case, group or variable to an established body of research, including a previously ignored sub-population or dimension of the topic, an emergent or changing population or sub-population, a different time frame, or an event that may have affected the group or organization of interest. In some instances, the emergence of new data or information has called into question previous approaches to your topic. These types of studies are perfectly reasonable and can make a very valuable contribution to the literature either by reinforcing or extending previous research in the area.

Yet adding a new case does not automatically make for an interesting research problem. If previous research on your topic has been largely conducted in the United States, simply adding a Canadian case study is not a good enough problem rationale. *You must first articulate*

why the new case is a meaningful extension to the literature, why the new case is a suitable addition or why it makes for an interesting point of similarity or comparison.

To summarize, can you justify how your addition transforms our understanding of the topic through new data, conceptual framework or methodology? Can you convince your audience that the addition makes a significant contribution to the literature or addresses some wider policy or public concern beyond fooling yourself that ‘more’ or ‘new’ data must mean ‘more’ understanding?

Comparisons: Comparing like and unlike things

Key takeaways

- The Comparison approach compares like, unlike or deviant cases.
 - The key challenge is to recognize the comparative dimensions and demonstrate that the comparison is appropriate. A comparative argument is not the same as a comparative research problem that is supported by a systematic comparative problem formation, research design and analysis.
-

For the purpose of this chapter, we consider two dimensions of comparative problem formation: i) recognizing the comparative dimension; and ii) demonstrating that the comparison is appropriate (for a similar discussion of representation as it relates to case selection, see Seawright and Gerring, 2008).

Recognizing the (potential) comparative dimensions of your project

Comparative arguments are common in qualitative research; however, the formation of comparative research problems (and design and analysis) are under-utilized. Specifically, when you construct your research problem with an implicit assumption of ‘similarity’, ‘difference’ or ‘uniqueness’, you must give equal weight to the other thing or group that you are implicitly comparing it to. In some cases, the comparative frame will emerge organically; however, in many cases potential comparison groups can be anticipated well in advance, either because it makes practical sense or based on prior knowledge.

Willis’ (1977) *Learning to Labour: How Working Class Kids Get Working Class Jobs* is a famous example of a poorly designed ‘comparative’ argument. Willis followed a group of rowdy and defiant working class boys in an industrial part of England for about three years. Willis’ central argument was that the working class students’ (‘the lads’) resistance to school authority was more than teenage antics; it represented their insights into class reproduction. Their ‘resistance’ to school authority was an attempt to control their labour power, particularly given that working class kids were destined, as the subtitle

suggests, for working class jobs. The lads' insights were held up against the radically different approach to that of the 'ear'oles' – the hardworking boys in the class who conformed to schooling authority.

Willis is sketchy on the methodological details, but his analysis suggests that most of his description of the ear'oles came from the lads (rather than from a direct examination of the ear'oles or their families). Most strikingly, had he by chance selected the 12 ear'oles who also hailed from similar working class families rather than the 12 lads for his study he could have arguably made the opposite argument: that working class kids have insights into the potential for human capital accumulation, meritocracy and class mobility. In short, *a comparative argument (or conclusion) is not the same as a comparative research problem that is supported by a systematic comparative problem formation, research design and analysis.*

Demonstrating that the comparison is appropriate

When considering the comparative dimensions of your research problem, you must be able to articulate (and defend) the appropriateness of your choices. We discuss two dimensions of this approach:

- Internally driven comparison.
- Method of agreement and difference.

Internally driven comparison

Internally driven comparisons demand that you demonstrate that the two or more units of interest (e.g., communities, organizations) are similar or different on the *key attribute of interest* or that the case represents a deviation from the norm on *the key attribute of interest*. Hochschild's (2012) famous study is a classic example of the former approach. She compared and contrasted bill collectors and flight attendants; not the most obvious choices! What they do share, however, is that both involve what Hochschild coined 'emotion work', labour that demands the management of feelings. While flight attendants must smile and work hard to inflate passengers' egos, bill collectors are expected to be nasty and deflate their clients' egos. Thus, while the organization of work is very different, in each setting workers must suppress what they really feel in order to elicit a particular response from their clientele.

Method of agreement and method of difference: Outcome driven

Method of agreement and method of difference approaches are similar to internally driven comparisons, but include examining several cases that had a particular outcome and working backwards (Mill, 1843). In the case of method of agreement, researchers isolate the conditions that may explain the generic conditions that led to that outcome

in the first place. In the case of method of difference, researchers consider two cases that share many characteristics, but have had a different outcome (e.g., war versus peaceful negotiation). The missing antecedent is used to explain the divergent outcomes and in some cases make causal statements about the conditions that led to them (for discussions of this approach see, e.g., Goldthorpe, 1997; Mahoney, 2000).

Skocpol (1979), for example, famously used the method of agreement to argue that internal pressures and agrarian relations were sufficient causes of peasant revolts in China, France and Russia. She then used the method of difference to argue that countries that did not have these conditions (e.g., England, Prussia) also did not have peasant revolutions (for a discussion see Emigh, 1997; see also Skocpol and Somers, 1980). The countries that she selected varied immensely (e.g., language, culture) but they shared a common outcome, peasant revolt or no peasant revolt, that made them a suitable starting point for comparison (see also Ragin, 1987).

In summary, we stress the importance of considering key sources of similarity or difference, or key sources of deviation in the process of research problem formation.

Evolution

Key takeaways

- The Evolution approach examines a process or change.
 - The key challenge is to demonstrate that the process or change makes a meaningful extension to the literature.
-

Questions that deal with what or how something occurred, how it was experienced, or how group members made sense of a particular event are routinely posed by qualitative researchers. These types of inquiry also span theoretical approaches – from grounded theory to more deductive process tracing (for a discussion see Bennett and Elman, 2006).

Like quantitative researchers, qualitative researchers can examine the process of a particular thing retrospectively; but unlike quantitative researchers, qualitative researchers can examine how something evolves or is experienced in real time. You may, for example, be interested in how patients experience a particular healthcare protocol or how school staff implement a new bullying prevention programme. But why should this be interesting to anyone? Similar to our Plus One discussion above, you must go beyond simply stating that you are going to show how something happened or how it works. In summary, *examining a process or change is only useful if you are able to clearly articulate how it makes a meaningful extension to the literature.*

The challenge: Empirical or theoretical

Key takeaways

- The Challenge approach articulates a conceptual, methodological or theoretical 'gap' or shortcoming.
 - The key challenge is to articulate the shortcomings in a manner that is fair and accurate.
-

When articulating your research problem, we note the importance of outlining problems or omissions from the literature. However, *articulating a conceptual, methodological or theoretical gap is not the same as throwing a metaphorical hand grenade and ducking for cover*. Less experienced researchers will often feel like they have to 'pick a team' and demolish the literature with a scathing review or an assertion that 'no one has looked at X problem' before. Such proclamations are often wrong, are less sophisticated and quite frankly are usually not terribly interesting. This is not to say that this tactic is not used, and used quite effectively, but such arguments are usually advanced by someone after years of careful scholarship or *after* a major research discovery. As Firebaugh (2008: 8) notes 'the burden of proof rests with you to identify some shortcoming or flaw that is serious enough to raise questions about the reliability of earlier results. Personal anecdotes are not enough'. We wholeheartedly agree.

In summary, the relative weakness of the literature is more likely based on less than ideal data, substandard data analysis, a failure to capture a dimension of the problem at hand, or new evidence that casts some doubt on the original analysis. A less confrontational approach, such as 'the research on my topic has looked at X, but to date hasn't tended to look at Y dimension of the topic' is a much safer and likely more accurate rendition of the research problem at hand. If you take seriously the questions we pose above you will hopefully avoid this classic mistake by making an informed critique of the literature you hope to contribute to.

CONCLUSION

This chapter outlines concrete tools for conceptualization. To review, we first presented strategies for selecting a topic, including secondary and primary sources and various kinds of concept or literature mapping techniques. Next, we discussed how you can transform your topic into a research problem that is worthy of scholarly investigation. We articulated the importance of determining your audience and developing a clear understanding of the conceptual, theoretical or empirical gaps in the literature. Anticipating and preparing for these questions will improve your research design by forcing you to think about potential weaknesses and conceptual holes that could possibly weaken your project or contaminate the data collection process.

Now that you have the tools you need to select and justify a topic, the next chapter details the mechanics of research design. The chapter is designed to provide you with the tools you need to transform your topic to a researchable research question and project. By the end of the next chapter you will understand how to craft a researchable question, and how to marry this question with the best method for answering it.

KEY TERMS

Comparative Projects	Method of Agreement and Difference	Scholarship of Me Project
Empirical and Theoretical Challenge Projects	Mind and Concept Maps	Secondary Sources
Internally Driven Comparisons	Primary Sources	The Plus One Project
Literature Maps	Research Intention	
Literature Review	Research Problem	