CHAPTER **9**

The Conceptual Framework as Guide and Ballast

As we established in Chapter 1, there is considerable confusion and even disagreement about both the content and role of conceptual frameworks in social science research. The ambiguity around the substance, form, and terminology of conceptual frameworks, we argued, leads to an array of terms—*theoretical framework*, *conceptual framework*, *conceptual model*, *theory*, and *literature review*—being used imprecisely or even interchangeably, as well as to amorphous expectations and directives for the conceptual framing of empirical research. Despite all of the attention given to the importance of conceptual framing in master's theses and doctoral dissertations and in academic research more broadly, many academics struggle to explain how such framing occurs, what a conceptual framework comprises, how it influences the research process, and why a conceptual framework is important to the processes and outcomes of empirical work. Throughout this book, we have argued that the conceptual framework organizes and informs research; ensures a close alignment between topic, questions, and methods; and provides a mechanism for integrating and new data, findings, questions, and literatures as a study evolves. We have endeavored to clarify the terminology, functions, roles, and uses of conceptual frameworks through the close examination of real-world research examples, illustrating how each is conceptualized, constructed, and implemented within and across the stages of the research process. Examining each of these six conceptual frameworks as they ground and guide the research projects at the center of *Reason & Rigor*, one of our main points in this book is that the conceptual framework is influenced by, as it influences, the research process within and across all stages.

We have defined a conceptual framework as an argument as to why the topic of a study matters and why the theoretical and methodological tools for conducting the study are rigorous and appropriate. By *argument*, we mean that a conceptual framework is a series of sequenced, logical

▶ 193

propositions aimed to convince readers of the importance and rigor of a study. By *appropriate and rigorous*, we mean that a conceptual framework should help the researcher to argue convincingly that: (a) the research questions are an outgrowth of the argument for significance and relevance to the field or fields; (b) the research design maps onto the study goals, questions, and context(s); (c) the data to be collected provide the researcher with the "raw material" necessary to explore and substantively respond to the guiding research questions and topic; and (d) the analytic approach will allow the researcher(s) to effectively respond to the guiding research questions.

The conceptual framework is a guide for research; it serves to situate the research questions and the methods for exploring them within the broader context of existing knowledge about a topic even as the researcher seeks to generate new knowledge about that topic. As we stated in Chapter 1, carefully examining prior research is not simply a lofty academic exercise, but is also a vital process of learning from the experience and expertise of other experts in the field. A conceptual framework allows you, the researcher, to make informed, reasoned, and defensible choices about how to explore research topics and themes that are underexplored and to explore old questions in new contexts and with new theoretical frames and approaches. A conceptual framework matches your research questions with those choices and aligns your analytic tools and methods with your questions. It also guides the ways that you think about collecting, analyzing, describing, and interpreting your data. Further, a well-articulated conceptual framework helps you to conceptualize, theorize, and critically examine your own social identity and positionality in relation to your choice of research topics and contexts, approaches, and methods.

It is for all of these reasons—the range and variation of crucial roles that a conceptual framework plays—that we view the conceptual framework as a guide and ballast for empirical studies. This range of roles is also why we strongly argue that a conceptual framework is different from—broader than—a theoretical framework. We have argued throughout this book that a theoretical framework—the way in which a researcher engages with, integrates, and argues from existing, "formal" theories within and across relevant fields—is one piece of a broader conceptual framework that also incorporates personal interests and goals, identity and positionality, and topical research.

The role that conceptual frameworks play in research is multifaceted and iterative. An examination of these various roles helps us as researchers to make critical connections between the theoretical and methodological

components of our research. A carefully conceptualized and well-articulated conceptual framework helps us to clarify for ourselves and for others what is important to us as researchers about the questions or problems that emerge from our intellectual and practical engagement in the world broadly and in our research contexts specifically. There is great range and variation in the scale of why a study "matters," depending in part on the audience, purposes, and contexts. Developing sound conceptual frameworks allows us as researchers to situate ourselves in terms of what is meaningful in the field or fields that form the context of our studies and questions. Additionally, a conceptual framework consists of our own intellectual curiosity, our personal and professional biographies and histories, and our macro-social (sociopolitical) and micro-social (institutional) locations and positionalities. These aspects of our personal, social, and organizational identities and contexts have much to do with what we choose to study and how we choose to study it. In this sense, our personal interests and stories are a foundational part of our conceptual frameworks and therefore of our research as a whole. Our conceptual frameworks are informed by, as they inform, our ideological, theoretical, positional, and relational worlds. Conceptual frameworks allow for focused, systematic exploration of these aspects of who we are, what we study, why we choose to study it, and how we choose to study it.

Focusing on the work of five highly accomplished contemporary researchers—Angela Duckworth, Frederick Erickson, Michelle Fine, Margaret Beale Spencer, and James Spillane—we have closely examined the ways in which each of these researchers' conceptual frameworks inform and shape different aspects and stages of the research process. While we have examined the relationship of the conceptual framework to specific stages of the research process in each of these chapters, common across the examples included in the book is an emphasis on the conceptual framework as a pragmatic tool for uncovering and exploring: (a) questions of relevance, applicability, and uses of empirical research; (b) the appropriateness of different types of research questions for specific topics, contexts, and methods; (c) the alignment of data collection and analysis to research questions; and (d) the interpretation and description of findings. William Dunworth's reflections tell a powerful and fascinating story about how each of these themes emerge in the course of planning and conducting an empirical study. Each example in this book shows the direct and significant implications of engaging in intentional and systematic ways in the development and ongoing refinement of one's conceptual framework. Looking across chapters illustrates the ways in which theory, empirical research, and context shape and influence the conceptual framework as that framework guides and grounds the research process. This recursive

process of conceptual framework development and research development reflects the iterative nature of empirical research.

In Chapter 3, "Origins of a Conceptual Framework: The Birth of Grit," we told the story of Angela Duckworth's formulation of grit as a concept, and the argument that she developed for it through reflection, dialogue, literature review, and, ultimately, data collection and analysis. We showed how developing and defining a concept shapes and informs methodological decisions and data collection, but also how the analysis of those data feed back into our evolving definitions. "Perseverance and passion for long-term goals" is a simple, even elegant, definition for a complex idea, but it took a long time and a lot of work to get there. Duckworth's story also reminds us that building conceptual frameworks is about experience and intuition in addition to scholarship and methods.

In Chapter 4, "Excavating Questions: Conceptual Frameworks, Research Questions, and Research Design," which focused on the work of James Spillane, we explored the ways that the development of Spillane's conceptual framework influenced his choices about research design. This chapter helps us to understand the role of the conceptual framework in defining, justifying, and contextualizing research questions and in guiding key decisions about the types of data required to explore and respond to those questions. Spillane's research helps us to examine how choices made about the conceptual framework of a study shape research design and significantly influence data collection and analysis. Exploring his work through this lens helps us to understand the interrelated and evolving nature of conceptual frameworks and research design. As we stated in the chapter, "Local Theories of Teacher Change" (the focal study analyzed in Chapter 3) uses the findings from a prior study that Spillane conducted to develop and contextualize a new set of research questions, and while it works from an earlier data set, it employs a new analytic approach—a shift from an inductive approach to a deductive one in the collection and analysis of his data—that is an outgrowth of modifications and refinements in the conceptual framework. That shift was precipitated by the incorporation of a new theoretical framework into his larger conceptual framework. Chapter 3 helps us to understand that as a result of the close link between conceptual frameworks and research design, development in one leads to development in the other. As we saw in that chapter, the implications of this engagement with his conceptual framework led Spillane to make significant, formative changes in his data analysis, which then led to a different, innovative set of findings and assertions back in the field.

In Chapter 5, "The Role of the Conceptual Framework in Data Collection and Fieldwork," we used the work of Michelle Fine to focus on the

iterative, recursive nature of conceptual frameworks as they are developed, challenged, and refuted through reflexive engagement in research fieldwork. This chapter explored the layered and powerful influence of conceptual frameworks on data collection and fieldwork choices. As Fine's work shows, conceptual frameworks are simultaneously guides for and products of an iterative, ever-evolving process of development that happens through critical dialogue and engagement in the research as well as the researcher's reflexive engagement with her own meaning-making processes as she engages in fieldwork. In Fine's work we are able to see, because she makes it transparent, how these meaning-making processes challenge and refute—as well as support and uphold—specific theoretical and ideological influences on the research. We argue that it is precisely through reckoning with the tensions and crosscurrents that arise when you scrutinize the influences—relational, positional, ideological, political, social, national, and transactional—on your research that the most creative, elucidating research findings emerge. Fine's work offers an excellent example of the close, nonlinear relationship between who you are, what you study, and how you study it. As we have argued throughout the book, a conceptual framework is the embodiment of all three. As a researcher, you make choices throughout the research process about what you think is important and interesting, and these choices reflect who you are as a person and what you value as a researcher. They also reflect where and with whom you work. The language you use to describe the research, the methods you employ, and how you write up and present findings are all a function of the social, political, and professional worlds you inhabit as a scholar. Fine's work elucidates that powerfully and stands as a poignant example of the role of conceptual frameworks for examining and thinking through issues of positionality, the relational nature of research and how these are influenced by macro and micro sociopolitical forces and realities.

In Chapter 6, "Conceptual Frameworks and the Analysis of Data," we turned to the work of Frederick Erickson. Based on Erickson's research process, we argued that at its ideal, a conceptual framework informs data analysis in direct, meaningful, and, ideally, transparent ways. We drew lessons from Erickson's example about how a well-articulated conceptual framework helps a researcher to: (a) make decisions about what is most important to pay attention to and substantively focus on throughout the analytic process; (b) choose appropriate tools for organizing and filtering the data; (c) make informed choices about taking an inductive or a deductive approach to data analysis; and (d) justify and make visible his own interpretive processes and choices, which are themselves shaped by his interests, values, and background. In particular, we highlight how the

central constructs or areas of focus identified within a conceptual framework—the timing of interaction, in this instance—are operationalized in the analysis of data.

"Going for the Zone," the empirical work at the heart of Chapter 6, is a particularly compelling example of the role of a conceptual framework in data analysis because it shows how the researcher draws upon, as he enters into dialogue with, multiple intersecting fields that contextualize and frame the research questions and context in focus. Erickson's engagement in multiple fields—sociolinguistics, discourse analysis, neo-Vygotskianism, social interaction theory, music theory, teacher research, and theories of culture and communication broadly—spans four decades and becomes instantiated in an interdisciplinary approach to making sense of data that were analyzed earlier using different theoretical frames. Erickson's own learning on the topic of student–teacher interaction in classroom contexts builds on (as it adds to) generations of field development and influences his approach to analyzing pre-existing data with a new and different focus. His long-standing engagement in iterative and reflexive framework development illustrates the ways in which analysis is a conceptually embedded process that can shift and change as one's theoretical lenses and conceptual framing shift over time. Erickson's consideration of a new theoretical framework led him to view, or review, the data differently, to see new and different things in them, and to recast his argument in an innovative direction. This can teach us a great deal about how conceptual frameworks inform analytic themes or categories as well as about how working theoretical frames influence quite specific moments of data reduction, organization, and analysis. As Chapter 6 presents, data analysis and theory development are, ideally, in an iterative and dynamic relationship.

In Chapter 7, "Expanding the Conversation, Extending the Argument: The Role of Conceptual Frameworks in Presenting, Explaining, and Contextualizing Findings," we focused on the work of Margaret Beale Spencer to discuss how researchers use conceptual frameworks to contextualize and make sense of findings as well as how findings are used to review, revise, and, ultimately, strengthen one's conceptual framework. The study by Spencer and her colleagues shows what can happen when you encounter surprises in your data, and how you can learn from those discoveries. The evolution of the Phenomenological Variant of Ecological Systems Theory (described in Chapter 7) offers an important lesson about the relationship between theoretical frameworks and empirical work. As we argued in Chapter 1, a theoretical framework is not simply applied to a setting—the data and findings constantly reflect and push back on the framework itself, offering valuable feedback about both its utility and its

conceptual strength. As we see in Spencer's case, it is crucial to remain open to these discoveries so that you can develop your understanding of your topic and questions. From this perspective it becomes clear that theoretical (and conceptual) frameworks are *supposed* to evolve, and that you must be attuned to shifts and changes as they emerge. We see in Spencer's work that the presentation and contextualization of findings serves two important functions related to the conceptual framework. First, it extends the argument. If a conceptual framework is an argument about the value of our research questions, discussion of findings can be thought of as an argument about the significance of the answers to those questions, taking the conceptual framework as a point of departure. Second, it provides a vital opportunity to reflect on and engage in data-based critique of the conceptual framework. This applies to both the substantive assumptions and ideas that form the argument (in this chapter, for example, the relationship between stress and response) as well as the methodological approach employed in the study. In this sense, findings are an outgrowth of conceptual frameworks and a response that strengthens and improves upon them.

Finally, in Chapter 8, our colleague William Dunworth pulled all of these aspects of conceptual frameworks together in a first-person reflection on his dissertation research in China. This story links and integrates all of the main lessons about conceptual frameworks that were highlighted in the previous chapters: the various factors and processes that shape our research interests, the ways we go about crafting working definitions and arguments for our topic and methods, the link between those arguments and the ways we collect and analyze data, and the processes through which changes in our methods feed back on and inform our thinking about, and arguments for, our topic. Dunworth's account is also valuable in that it presents a ground-level, student's perspective on the ideas and processes discussed at length in the previous chapters.

Within and across these six empirical studies, we see that the conceptual framework is more than a passive artifact or academic hoop to jump through, more than a static graphic of literatures read or key concepts in a vacuum. Rather, it is a dynamic meeting place of theory and method; it charts and provides a structure in which to analyze, over time, the multifaceted and layered influences on one's research in all of its messiness and complexity. A well-articulated conceptual framework instantiates itself deeply in empirical work, and serves to guide, ground, and challenge us as we develop and refine it. In order for your conceptual frameworks to serve these purposes, however, you must be committed to engaging in a systematic and reflective approach to the development, construction, and

enactment of your research. In this sense, the conceptual framework forces you to be intentional in your work. While the six scholars whose work is featured in this book are vastly different in terms of their research interests, disciplines and fields, methodological approaches, and the degree to which they explicitly address issues of ideology and positionality in their research, all six engage in this type of sustained reflection, critique, and, ultimately, revision of their conceptual frameworks. Their work offers powerful examples of how conceptual frameworks provide an interactive conceptual space for you to clarify, first for yourself and then for your audiences, the specific conceptual terrain upon which you build your study. To extend the metaphor, a solid conceptual framework helps you chart your expedition through theoretical, contextual, and conceptual terrain with increased clarity, depth of insight, and transparency. It helps you to cultivate your tools of conceptualization, articulation, and exploration of critical connections and integrations within and across fields, topics, and emerging understandings more broadly.

Throughout *Reason & Rigor* we have looked deeply into the roles, uses, and applications of conceptual frameworks. In each chapter and across the chapters, our goal has been to develop an understanding of the functional role conceptual frameworks play in organizing and guiding empirical research. A conceptual framework helps you to figure out how to engage deeply with existing knowledge in conjunction with your own interests and observations, and therefore to ask better questions, develop robust and justifiable strategies for exploring these questions, and explain both the value and limitations of your findings. Conceptual frameworks are necessary for developing and planning a study and, as well, help you deal with and address complexity in terms of questions and problems, ambiguity in terms of which fields relate to the topic and how, as well as to respond to changes in the fields your work inhabits, because those fields are not static. Our goal in the next section is to provide some useful questions, processes, and structures that can inform and guide you through various thought experiments and exercises that will help you think about your conceptual framework and its relationship to your study.

△ Developing a Conceptual Framework

As the preceding chapters show, every conceptual framework has its own story. Together, the six stories presented in this book offer a number of useful lessons about how to develop, use, and refine a conceptual framework. What we offer below is not a how-to guide. Just as there is no

single, best format for making an argument, so there is no single "right" way to build a conceptual framework. Indeed, one of the overarching themes of this book has been the role of the researcher's judgment in making decisions in ambiguous circumstances: How does who I am—as an individual whose history, perspectives, decisions, assumptions, and experiences are shaped within large-scale sociopolitical forces—affect what I study? Where and when do I engage in data collection? What kinds of data do I need in order to answer my guiding research questions? How will I know when I have enough data? How do I know when to revisit or reconsider my theoretical framework or to introduce new theoretical perspectives in my analysis? Each of these questions appears in the preceding chapters. In each case, the researcher had to make a reasoned, principled choice about how to answer each question as it arose. And in each instance, the conceptual framework for the study helped to anchor their considerations.

In the remainder of this chapter, we combine lessons from these six scholars, our own experiences, and those of our students to offer guidelines for developing and using conceptual frameworks. We first highlight several overarching themes that appear across chapters: the personal and autobiographical nature of conceptual frameworks, the role of conceptual frameworks in making and changing research plans, and the process of simultaneously being open to and pushing back on existing theory. We then offer suggestions about how to develop and refine your own conceptual framework. We think of this process as one of *reflexive engagement*— thinking iteratively about the connections among our own interests and values, what we are learning in the field and from our data, and what that tells us about the topic or phenomenon we are trying to understand. While this term reflects language more frequently employed in qualitative methods, we hope that by this point it has become clear that mixed methods and quantitative researchers often engage in a similar type of reflective thinking and analysis. And that reflexive engagement is an important, generative, and valuable approach to research within and across methodological approaches (Alvesson & Sköldberg, 2010; Ravitch & Carl, 2016)

Starting Points: Self and Audience

As each of the chapters in this book shows, there are really two primary ways of thinking about the starting point for a conceptual framework. The first is a careful consideration of where and how you began to think about what you want to study. One of the more striking aspects of the six research stories told in this book is how frequently and powerfully

autobiographical the origins of research can be. In telling us about the origins of their research interests, three of the five scholars featured told us stories about their childhoods and their families, while another traced the genesis of researcher's interests to her work before she became an academic. These stories remind us that however technical and complex the work of research becomes, it is also fundamentally human. The larger point here is not that all research needs to be deeply and personally meaningful. Curiosity, interest, and a sense of what types of research are needed are all perfectly reasonable rationales for selecting a particular topic or question. What is needed, however—and this is especially true for dissertation work, which can be an endurance test—is a critically conceptualized and carefully articulated personal connection to the work. (Dunworth provides an exceptional example of this in Chapter 8.) Knowing what you want to study is obviously the starting point for conceptual frameworks and research in general, but being aware of why you, personally, want to study it is equally important. Engaging in this discovery process can help you as a researcher to develop a working sense of your own intuitions and motivations as well as the assumptions or biases you may be bringing to the work. This book is built upon several perspectives on empirical research, among them that: (a) research is not neutral or apolitical; it does not happen in a vacuum, but rather, it is directly shaped and influenced by sets of broader contexts ranging from the personal to the political, social, and institutional; (b) there are most often autobiographical motivations for research, be they personal, professional, or some combination thereof; and (c) all researchers (indeed all human beings) are informed by personal biases, presuppositions, and assumptions, and these must be carefully uncovered and critically engaged with in order for research to be as authentic and trustworthy as possible (Nakkula & Ravitch, 1998; Ravitch & Carl, 2016). As we have stated throughout the book, we see developing and refining a conceptual framework as an ongoing process of critically examining and reckoning with these forces and their influence on our empirical work.

The second "point of departure" is where you ask your reader to begin, and that is largely a question of audience. All six of the empirical studies discussed in this book assume something about the reader: what they know or do not know, or what interests they might bring to the text. Because each of the works presented here was published in an academic journal, as a chapter in an edited volume, or as a dissertation, all assume that their typical reader is academically oriented and likely somewhat familiar with and interested in their field. For example, Spillane does not try to convince his readers that education policy is important, nor does

Duckworth feel the need to argue that it is important to understand what makes people successful. More subtly, at least two of the articles anticipate a certain political orientation from their readership. Neither Fine nor Spencer spends much time trying to convince the reader that academic work has traditionally aided in the misrepresentation (at best) and oppression (at worst) of marginalized populations. They assume that this is largely understood, and instead begin by explaining to the reader how they engage with and counter that dynamic in their work.

Making—and Breaking—Your Plans

Each of the six conceptual frameworks presented in this book clearly shows how the framing of arguments about what to study has significant implications for the design and execution of empirical research by highlighting how this works for specific phases of the research process. But an equally important point is made across all six chapters: Research is dynamic, not static. The more expert we become in a topic, the more nuanced our view becomes, and the more we expose ourselves to observations or findings that challenge and raise questions about our original assumptions. For example, Fine's expanding understanding of the significance of "the hyphen" as both metaphor and method reflects this natural progression, as does Spillane's convergence on theories of learning as central to understanding local implementation of state reforms. Likewise, Dunworth's evolving understanding of *guanxi* and its impact on access and data collection totally reshaped his view of what it was he was studying. Additionally, because the conceptual work of research unfolds over time, there is always the possibility that the work of others shapes our own. All six of the scholars featured in this book told stories about how their peers, colleagues, and mentors shaped and reshaped their thinking over time. Erickson, for example, recounted how conversations with friend and colleague Ray McDermott led him to see what was happening in his data through a lens that more explicitly focused on power and influence. Finally, just as our thinking changes as our research unfolds, so do our understandings of the physical context in which the research is conducted. This has profound implications for the data we collect, even if our instruments or procedures for collecting it remain unchanged. In each of these six cases, changes in thinking about the researcher's topic or the context of the research precipitated changes in methods. For Spillane, it precipitated a shift to a deductive analytic process using a new theoretical framework. For Dunworth, it meant reimagining his interviews as a networking activity. For Fine, it meant shifting into more mixed methods

work and involving participants more fully in the research design and development process. For Erickson, it gave rise to an innovative concept, the relational concept of "turn sharks," and a different way of analyzing timing in interactions. For Duckworth, it led her away from using performance tasks to measure grit and toward creating a survey scale. These types of shifts are a natural, and often desirable, part of the research process. A good conceptual framework provides a clearly articulated reference point from which we can observe, and make sense of, these changes as they unfold.

The Conversation: From Listening to Speaking

In each of the works discussed in this book, we (and the authors themselves) show how previous research and theory shaped their thinking about what to study and how to study it. Once these researchers established their own starting points (as described above) they opened themselves up to be influenced by others. This is evident in the way Spencer defines identity, perceptions of experience, self-organization, and risk. It appears in Erickson's invocation of neo-Vygotskian theory, in Spillane's extension of the arguments of Deborah Ball and David Cohen, and in Duckworth's reading of William James. It also emerges in the stories these six scholars told us during their interviews about their own learning; each could readily recite their intellectual autobiography, recounting changes in their own thinking as they engaged with different bodies of theory and research as well as in dialogue with others.

As Maxwell (2009) and Dressman (2008) point out, however, the relationship of research to theory is not unidirectional. Just as theory shapes our work (and our thinking about doing the work), what we learn through research leads us to revisit and reconsider established theory. As researchers, our job is not only to draw on theory but also to engage with and critique it. It is significant, then, that Spencer's research not only builds on theories of identity but also critiques their lack of reference to social context and power, and that her findings about links between risk exposure and attitudes led her to significantly revise her own theoretical framework. In the case of Erickson, it is important that looking at his data through a neo-Vygotskian lens led him to interrogate what he viewed as the interactional naïveté of existing theories. For Duckworth, realizing that grit and ability were not in fact related represented the crystallization of a decade of work.

In Chapter 2, we highlighted the question of when and how to enter "the conversation already happening" as represented by academic literature.

The six examples presented in this book suggest that the answer may be far from simple. On the one hand, you make an initial foray into the conversation when you justify the study. This constitutes a first full articulation of your conceptual framework. But to continue the metaphor, you should not simply enter the conversation and then withdraw. Rather, it is vital to remain fully engaged, interjecting your voice where you see it as needed or appropriate. Further, what you choose to add to the conversation may be quite different at the end of your study than it was at the beginning. It is important to engage in this process as a critical, active interlocutor rather than a passive, disengaged consumer of others' work. Working to develop and articulate your conceptual framework can be thought of as a way to engage in meaningful dialogue with other thinkers; it can and should be a structure that encourages and supports critical, integrative sense making that is connected to the work of others. What follows are examples of specific approaches to engaging in this multilayered process.

Strategies and Exercises for Developing △ Conceptual Frameworks

Reflexive engagement requires that you create structures in which you can, from the outset of the research development process and incrementally over time, examine your own assumptions and motivations for studying a particular topic in a specific context, to ask broader questions about where the field is in terms of what you think of as "the conversations already happening," and to examine the relationships of research questions and methodological approach. In the discussion that follows, we offer strategies to assist in cultivating and sustaining a reflexively engaged approach throughout the research process, including the development of prompted research exercises, concept maps, research memos, and maintaining a research journal. The ideas below are intended to sketch out possibilities for structured thought experiments; they are not meant to be exhaustive or prescriptive. We strongly encourage you to engage in these exercises individually as well as in dialogue and collaboration with others who will engage thoughtfully and critically with you as you design and carry out your research, pushing you to examine parts of yourself and your research that you might otherwise take for granted or leave unexamined. As the examples from the previous chapters show, dialogue and exchange are essential to the trustworthiness of your empirical work, and we strongly encourage an approach to research that is dialogical and relational as well as internally engaged. The two go hand in hand as means

of conducting the most rigorous, credible research possible. Conceptualizing and carefully documenting these processes is an important part of your methodological approach.

It is important to engage wholeheartedly in asking questions—sometimes sequentially and sometimes iteratively—about what is of value to you as a researcher and why it is valuable, useful, and important. What follows are broad areas for examination and reflection, with sets of possible questions to explore in each realm (though we would argue that these areas bleed into each other and should not necessarily be compartmentalized). Ideally, you would return to specific questions at various stages throughout the research process.

Identifying Your Interests, Beliefs, and Motivations for Doing Research

The following are questions that we encourage you to explore in order to engage in a process of self-examination at the outset of your research and then iteratively throughout the research process. These questions can be addressed in memos, through dialogue with thought partners and in inquiry groups, and in research journals or other ways of documenting your thinking as it emerges in real time and over the span of your study.

- What is interesting to me and why?
- What personal and professional motivations do I have for engaging in this research? How might these motivations influence how I think about and approach the topic?
- What are my beliefs about the people, places, and ideas involved in and related to my study? Where do these beliefs come from? What assumptions underlie these beliefs?
- What orientations to the topic, setting, and concepts do I have? Where do these ideas come from?
- What is my sense of the relationship between the macro and micro sociopolitical circumstances in which people make meaning and choices in their lives? With respect to the participants in my study specifically?
- What is my "agenda" for taking up this topic in this setting at this time? (Having an agenda is not necessarily a bad thing. This may be the foundation of your argument!) What influences this agenda? What biases shape this agenda?
- How might my guiding agenda contribute, both positively and negatively, to my research design? Implementation? Analysis? Findings?
- What hunches do I have about what I might find and discover? What informs these hunches?
- What concerns, hopes, and expectations do I have for this research?

Examination of the "Conversations Already Happening"

The following questions relate to how your proposed research fits into the landscape of what is already known about that topic, phenomenon, or population. As with the section above, these questions can be addressed through the writing of memos, through engaging in dialogue with thought partners and in inquiry groups, and in a research journal or other ways of documenting your thinking as it emerges throughout your study.

- What are the major conversations in the field or fields that form the context for my research topic and questions?
- What are some of the major arguments and positions in these fields?
- What do I think about the various strands of these conversations?
- What is the next critical set of questions to ask within these fields?
- Is the next set of questions about theory testing? Is it to contribute to a field or fields by studying something already researched with new methods or in a new setting?
- Which fields and disciplines intersect in ways that contextualize and frame my research questions or topic?
- What are the major tensions and disagreements within and across these fields? What is my critique of these various overlaps, tensions, and disagreements?
- What do I hope to contribute to these conversations?
- What are my concerns about my possible contributions to existing research?
- How do I intend to include these various conversations in my examination of the existing literature?
- What are my thoughts and concerns about how these fields have constructed the issues at hand?
- Are there voices or points of view left out of or marginalized within these conversations? If so, who is left out and why might that be the case? And how might that influence my own construction of this topic or my research questions?
- How do I conceptualize and position my research in relation to the conversations already happening? And why am I making these choices?
- Looking within and across fields and disciplines, what are some of the differences in how these topics and questions are framed? How do I relate that to my own thinking?
- What methodological approaches do various researchers in these fields use in their research? Why? How do these approaches relate to my own methodological choices?
- What are the methodological strengths or weaknesses of the work that has already been done? How have methodological trends influenced what is known about this topic?
- Which parts of the conversation are grounded in solid empirical evidence, and which have a thinner evidence base?

Ongoing Questions and Concerns About the Research

The following questions can be asked throughout the process of engaging in research fieldwork. In essence, these are ways of "checking in" with aspects of your conceptual framework throughout the process of data collection and analysis. These questions can be addressed in multiple ways as the research progresses, in memos, through dialogue with thought partners and in inquiry groups, and in research journals or other ways of documenting your thinking over time.

- What do I tend to gravitate to in my observations and interpretations, and why? What can I learn from this about my approach to research? About my own subjectivity?

- To what extent are these proclivities informed by my conceptual framework? To what extent do they help me cultivate a better sense of influences on my thinking, both broadly and specifically in the field? Do they constrain my thinking and, if so, how?

- What emerging hypotheses or hunches do I notice? How might I theorize these in relation to the literature? In relation to my data?

- Is my conceptual framework limiting or shading my view of my setting, participants, or data? (Again, this is not necessarily a bad thing, but it is important to be aware of.) If so, in what ways?

- What am I learning through data collection, and am I contextualizing and problematizing my learning as I go? In what ways? How might I endeavor to do so more fully?

- What assumptions am I making about local meaning making and knowledge? Am I making sure to understand that local knowledge is not monolithic? What do I actually mean by "local"?

- To what extent might participants' perspectives differ from my own interpretations as a researcher? And what do I do about that?

- What biases might I have in relation to local meaning making and knowledge? How can I best interrogate my assumptions as I move through the research process?

- How does what I am learning from my data inform or push back on elements of my conceptual framework? On existing conceptualizations of the phenomena under study?

- To what extent are the assumptions I made in the design phase about what was important or relevant to my study supported by my data? What blind spots might I have overlooked?

- What alternative interpretations or explanations exist for what I see in the data?

- What other kinds of data might I need to be able to more fully respond to my research questions?

- What issues of validity or trustworthiness are emerging, and how am I engaging with and addressing them?

- How does my identity and positionality—psychological, social, and institutional—influence the research process? How can I get feedback on this throughout my research? And how can I address the aspects of this that need to be attended to?
- What disconfirming evidence can I find that challenges my existing understanding and interpretations of the data?
- What are alternative interpretations of the data? How can I seek those out as a part of the research process?

These types of questions, if asked in ongoing and systematic ways, help lead us as researchers to critically reflect on and gain insight into the motivations for and the findings of our empirical work. This reflexive process is in part about engaging in ongoing reflection and in part about challenging oneself to stay tuned into the research on multiple levels as it develops. Again, we urge researchers not only to engage in this kind of structured, prompted reflection in writing (since writing engenders a focused commitment to examination and critical inquiry), but also to engage in dialogue with colleagues and peers who will challenge us to examine these issues in layered, complex, constructively critical ways (Leshem, 2007; Ravitch & Carl, 2016). Complicating our research in these ways is essential to its reliability and constructive development. What follows are some written structures and processes that can assist researchers in engaging in focused, critical, systematic sense making in relation to their empirical research.

Concept Maps △

Concept maps have been around for decades. There are a number of valuable texts that offer suggestions for concept mapping broadly and the visual representation of conceptual frameworks specifically. These texts have a variety of definitions of conceptual frameworks (as reviewed in Chapter 1) and approach the creation and development of conceptual frameworks and concept mapping from a variety of vantage points. Shared across them is the idea of visually mapping the various components of your conceptual framework as a means to clarifying connections between the various conceptual, contextual, and theoretical influences on a research study. The concept map examples in William Dunworth's research in Chapter 8 show this in action, and help us understand the value, roles, and uses of a conceptual framework throughout the research process. Specifically, they illustrate the overarching categories that frame

his study, the specific concepts or ideas that reside within those categories, and the overlap among them. It is also important and interesting to compare the concept map that Dunworth began with and the one that eventually appeared in his writing—in a concise and powerful way, these two pictures tell the story of what he learned about his topic through the process of rethinking his approach to his fieldwork.

Two of the most popular books that provide both novice and experienced researchers with tools for developing conceptual maps (and the broader conceptual frameworks in which they are nested), as mentioned earlier, are Maxwell (2013) and Miles, Huberman, and Saldaña (2014). Maxwell defines concept maps in this way:

> A concept map of a theory is a visual display of that theory—a picture of what the theory says is *going on* with the phenomenon you're studying. These maps do not depict the study itself, nor are they a specific part of either a research design or a proposal. However concept maps *can* be used to visually present the design or operation of a study.... Rather, concept mapping is a *tool* for developing and presenting the conceptual framework for your design. And like a theory, a concept map consists of two things: concepts and the relationships among these. (p. 54, emphasis in original)

Maxwell (2013) asserts that the two main reasons for developing concept maps are (a) "To pull together, and make visible, what your implicit theory is, or to clarify an existing theory. This can allow you to see the implications of the theory, its limitations, and its relevance to your study"; and (b) "to *develop* theory. Like memos, concept maps are a way of 'thinking on paper'; they can help you see unexpected connections, or to identify holes or contradictions in your theory and help you to figure out ways to resolve these" (p. 54). Maxwell argues that concept maps require an iterative development process, and his book offers several structured exercises that can help researchers develop concept maps that are fitting and useful for their studies.

Miles, Huberman, and Saldaña (2014) suggest that conceptual frameworks can be developed as both graphic representations and narratives, and suggest that concept maps are a critical tool in the development of a conceptual framework. They assert that concept maps are best developed graphically rather than in narrative form because that allows the researcher to visually lay out sets of relationships to explore and make sense of. They

argue that mapping concepts is foundational to solid working theories in empirical work:

> Conceptual frameworks are simply the current version of the researcher's map of the territory being investigated. As the explorer's knowledge of the terrain improves, the map becomes correspondingly more differentiated and integrated. Thus, conceptual frameworks are developed at the beginning of a study and evolve as the study progresses. A conceptual framework forces you to be selective—to decide which variables are most important, which relationships are likely to be most meaningful, and, as a consequence, what information should be collected and analyzed—at least at the outset. (p. 20)

While Miles, Huberman, and Saldaña (2014) speak directly to qualitative researchers, we have argued throughout this book the development of conceptual frameworks is a critical process for researchers using qualitative, quantitative, and mixed methods approaches. Whether your work is qualitative, quantitative, or mixed methods, mapping relevant central concepts visually can help to refine your working understandings of the topics and contexts at play in your research by forcing you to represent relationships visually as well as in narrative form. For example, in Chapter 7, we include an example of a concept map in an excerpt from Spencer's chapter "A Phenomenological Variant of Ecological Systems Theory." This concept map is integrated into the text as a figure (Figure 7.1) and is titled "Model of relationship among female, headship, stressful events, perceived social supports, general positive attitude, and learning attitude" (p. 149). In addition to illustrating hypothesized relationships between various factors, the figure also illustrates the relevant constructs employed in data collection and analysis and implies particular, quantitative analytic approaches focused on the strength of those relationships.

This particular concept map both contributed to Spencer and her colleagues' development of their framing of the sets of relationships constitutive of their overarching analytic argument and, as well, provides readers with a visual mapping of the study's key concepts and their dynamic and, as the authors argue, critical interrelationship. This example of a concept map illustrates how it can represent relationships among foundational concepts that, when considered and mapped out together, comprise the core conceptual framework of an empirical study. Using this example

helps us to understand that multiple aspects of a researcher's conceptual framework can be mapped out—and worked through—visually and that taken together, these constitute the overarching conceptual framework for the study.

We argue less for a strong emphasis on visual concept mapping per se, believing that researchers have preferred styles of framework development. While we agree with Maxwell (2013), Miles, Huberman, and Saldaña (2014), and others that visually mapping conceptual frameworks can be a valuable and clarifying process, we caution students about becoming too focused on the maps at the expense of realizing the value of developing a framework. To the extent that concept maps are generative and focusing, we wholeheartedly support them. When they become an end unto themselves—in other words, when they become viewed as a product rather than a process—we recommend a more narrative approach to concept mapping and conceptual framework development. Ideally, these two approaches go hand in hand. Some of this is determined by how you wrap your mind around the concepts in play (some of us are more visual learners than others) and some of it is shaped by the audiences, both real (such as a dissertation committee) and perceived (such as the audiences you envision for your published work). However you approach the construction of concept maps, they are an important building block of your conceptual framework and of empirical research more widely. Be sure that when they appear in your final works, that they are narrated since others reading them need to understand the connections you are making in the visual form.

△ Research Memos

Research memos are a long tradition in qualitative research (for discussion and examples of research memos, see Emerson, Fretz, & Shaw, 2011; Maxwell, 2013; Miles, Huberman, and Saldaña, 2014; Ravitch & Carl, 2016; Strauss & Corbin, 1990). Research memos have different purposes and formats, but the common goal is to create conscious moments of structured, systematic reflection during the development and implementation of your research project. For example, Maxwell discusses the Researcher Identity Memo as a way to document and examine your intentions, thoughts, goals, and interests as you enter into your research. This type of reflexive memo can be an early-stage approach to research design that helps you identify and engage with aspects of your relationship to your research, but it can also extend well into the research process as it unfolds

over time. It can help you focus on your particular, individual influences and contextualize the research endeavor and your researcher identities in relation to broader spheres of influence such as social location and social identity. More broadly, many researchers discuss the use of memos to develop research questions, explore issues of validity, examine the dynamics and undercurrents of research relationships, engage in proposal development, and support and provide structure to the analytic process. For example, Emerson and colleagues conceive of three primary types of analytic memos: *initial*, *in-process*, and *integrative*. For them, memos are largely focused on the coding of data at the various stages of the analysis process. Memos become a structured place for systematic, structured data analysis at the early, middle, and late stages of coding, theme development, and the emergence of analytical categories and findings. Miles, Huberman, and Saldaña (2014) cogently describe the role of memos in the analytic process:

> An analytic memo is a brief or extended narrative that documents the researcher's reflections and thinking processes about the data. These are not just descriptive summaries of data but attempts to synthesize them into higher level analytic meanings. They are first-draft self-reports, of sorts, about the study's phenomena and serve as the basis for more expanded and final reports. Memos are typically a rapid way of capturing thoughts that occur throughout data collection, data condensation, data display, conclusion drawing, conclusion testing, and final reporting. Later in the study, however, memos can be more elaborate, especially when they piece together several strands of the data or look across multiple measures of a construct. … Analytic memos are primarily conceptual in intent. They don't just report data; they tie together different pieces of data into a recognizable cluster, often to show that those data are instances of a general concept. Analytic memos can also go well beyond codes and their relationships to any aspect of the study—personal, methodological, and substantive. They are one of the most useful and powerful sense-making tools at hand.... (pp. 95–96)

Research memos allow you to choose strategic moments across the research process to delve deeply into specific, substantive issues and layers of analysis in the research. When you examine your research in these kinds of incremental ways throughout the process, the relationships between the various aspects and stages of the research become more

visible and valuable. Take for example the following memo written by Michelle Fine concerning her emerging understanding of the guiding concept of hyphenated selves:

Research Memo: 2/15/07, Musings About Hyphenated Selves

Why use hyphen as the metaphor—does it reflect a space between like Anzaldúa, that connects and separates; that marks fluidity and silos? Does the hyphen serve as an ironic link between two overessentialized identity categories? Might a verb or ellipsis … be better, or a hypertext form in which each slice of self is superimaged over/through/with the others, reflecting more creative fusion? But we need a metaphor that has room for the wide range of social psychological furniture these young people move into the space; the narratives from the young women and men reveal so many wild/contradictory/varied ways to conceptualize how they live the hyphen, what meanings they impute, how they perform in this contentious space between.

In the focus groups, I was just struck by the performance/ choreography of diverse social psychological labors at this hyphen—some dance, protest, shiver, hide, invent something new, place scarf on head while others remove, some don a Catholic cross and others grow more religious.

The hyphen offers a theoretical space that can hold politics, ideologies, institutions, relationships, pain, desire, subjectivities, and the intimacies of lives; the metaphor might do us well, as it holds the ambivalence that we need to excavate—a social psychological landscape where those who wander, or are exiled, can choose how they negotiate the land. And then I found material from Roosevelt and Wilson, suggesting the hyphenated identities have long been contested in U.S. debates about citizenship and where threat lies, and for that reason perhaps most significantly it seems important to queer, or reclaim the term. … Check this out: Former President Theodore Roosevelt in speaking to the largely Irish Catholic Knights of Columbus at Carnegie Hall on Columbus Day 1915, asserted:

There is no room in this country for hyphenated Americanism. When I refer to hyphenated Americans, I do not refer to naturalized Americans. Some of the very best Americans I have ever known were naturalized Americans, Americans born abroad. But a hyphenated American is not an American at all. … The one absolutely certain way of bringing this nation to ruin, of preventing all

possibility of its continuing to be a nation at all, would be to permit it to become a tangle of squabbling nationalities, an intricate knot of German-Americans, Irish-Americans, English-Americans, French-Americans, Scandinavian-Americans or Italian-Americans, each preserving its separate nationality, each at heart feeling more sympathy with Europeans of that nationality, than with the other citizens of the American Republic. … There is no such thing as a hyphenated American who is a good American. The only man who is a good American is the man who is an American and nothing else.

President Woodrow Wilson regarded "hyphenated Americans" with suspicion, saying, "Any man who carries a hyphen about with him carries a dagger that he is ready to plunge into the vitals of this Republic whenever he gets ready."

As we can see in this example, memos both result from and contribute to the development of your conceptual framework. They help you maintain focus on your own positionality and the dynamic aspects and issues of research, to delve into the substance of your study as well as your design, to examine your data using different analytic tools and taking different analytic slices of your data to analyze at various stages along the way, and to engage in formative data analysis. Memos, as we can see in Fine's case, are an enormously valuable, generative means of engaging in systematic reflection, analysis, and overall meaning making in your research. They also serve to chronicle and preserve your meaning making as it unfolds, in effect creating a narrative of your analysis process. As we suggested earlier, there are many kinds of and approaches to research memos, from descriptive to analytic, memos that focus on researcher identity, the development of conceptual frameworks, ideological issues, methodological concerns, thematic issues like how issues of power and authority or researcher positionality are instantiated in our research design, implementation, and data analysis (for particularly useful discussions and examples of these kinds of memos see Emerson et al., 2011; Maxwell, 2013; Ravitch & Carl, 2016). This is not to say that you will need to develop memos on all of these topics. Which memos prove most fruitful will most likely be a function of your research design and the kinds of questions and puzzles you encounter in your data. In each instance, however, the goal is the same: memos are used to both reflect and build on emerging understandings and conceptual frames as researchers engage in the research process.

△ Research Journal

The research journal is, from our perspective, a generally underused but important and valuable research tool. It is a place to examine—in an ongoing and oftentimes unstructured and informal way—thoughts, questions, struggles, ideas, and experiences with the process of learning about and engaging in various aspects of research. A research journal provides a space to engage in ongoing critical questioning as it relates to all facets and stages of the research process. Research journals allow you to: (a) develop the good research habit of documenting various aspects of your thinking and your work in real time; (b) create opportunities to develop and reflect on questions, concerns, and ideas about any and all aspects of the research as they emerge; (c) keep and critically engage with valuable references from the literature in relation to the research topic and methods, which you can incorporate into your emerging theories, your analysis, the final product, and future research; (d) reflect on your thoughts, interactions, and practices with respect to your role as a researcher, the setting and participants, and the overall research process; (e) chart your developing interpretations and analysis of the data; and (f) formulate and develop ideas for action or changes in approach as they relate to the research process.

For example, in James Spillane's interview about his research, he told us that in the research project that was the focus of Chapter 4 he used what he referred to as "notes to [him]self" (or what we would call a research journal) to chart the development of his understanding of the role of theory in his developing conceptual framework. In describing his more recent work, in which the research is conducted by a team and technology is more evolved than in years passed, Spillane told us that the handwritten notes of years past have been replaced by newer, technology-based strategies. As he shared,

> In this new study I'm doing, we have a conceptual framework document that's a living document, and it's added to, and we know when it's added to, and we make these decisions and we try and write them down and keep them explicit.

The technology of having a research journal as a public, shared document allows for a more dialogic, generative team approach and makes the insights accessible—and therefore subject to shared inquiry—between and among researchers as the process unfolds.

Similarly, in the interview with Frederick Erickson about his research, he stated that the evolution of his thinking about the conventions and

non-neutrality of the transcription process—which significantly influenced the taking up of new directions in his research—emerged through engaging in dialogue with colleagues and in reflective analytic writing over time. From Erickson we can learn an even finer distinction about the role of formalized, written reflection in the generation of data. In his interview, Erickson stated:

> I've been now for some years, as I teach participant observation research … I've been saying that field notes, your stack of field notes aren't data; they're an information source, and you discover data in them by linking pieces of a research question, or an assertion you want to make in, not in question syntax, but in declarative sentence syntax—when you connect an information bit to a research question, then it becomes a datum. While it's just sitting there in the corpus of information materials, it isn't data yet. And so the people who talk about the audiotapes as data—or even field notes as data—I think are actually mistaken.

In this point, we can see the powerful role of a researcher's process of explicating the interpretive process and, even more, the important role of formalizing and chronicling that process of interpretation by writing about it throughout the research process. As Erickson makes clear, analytic meaning making is central to the content and quality of a researcher's data. We argue that this interpretive process must be documented through an organic approach that can capture the complex and often intersecting influences on our thinking as they reside in the nexus of theory, research, and, at times, practice.

As a psychologist using quantitative methods, one might expect Angela Duckworth to be less engaged in this type of interpretive reflection. Yet in our interview, she spoke eloquently about the role and importance of research journals in chronicling her process, and especially in developing theory over a long period of time. She shared,

> If you look at those lab notebooks, I kept all of my lab notebooks for scientific integrity; I want to make sure I'm not cheating anyone. But, in the back of them, I would start making these charts, here's effort, here's motivation, here's volition. I think every year there's new versions, slightly different versions of these overarching theory.

As we understand from these reflections on the role of writing in the interpretive process, research journal entries provide you with an

opportunity to engage in less structured but still focused thinking about your research and the literature that forms its context, and, over time, allow you to make deeper connections between the substantive, relational, and contextual issues and realities that emerge throughout the research process. There is not a specific set of rules or guidelines for research journals (unlike memos, which each have a specific set of purposes and goals), but the goal is the real-time, incremental charting of insights and questions as they emerge over time. Some have argued that these entries can be viewed as phenomenological notes that chart your interpretations of the research process, including your own embeddedness in that process (Nakkula & Ravitch, 1998). Others consider them a crucial part of the data collection and analysis process and, in that sense, an essential source of data in empirical studies.

Together, the set of tools we describe here is intended to help you to develop and to get the best possible use out of a conceptual framework. Orienting questions help you to both refine and position your work, while reflective and analytic questions aid in making sense of the research as it unfolds. Concept maps offer a medium for developing and testing ideas about how the main topics or ideas in your research relate to one another. Research memos and journals are tools for diving deeper into specific aspects of your work as it unfolds and for documenting the process itself. Among other things, they help you to chronicle and tell the story of your conceptual framework as it grows and evolves.

△ Reason and Rigor

As professors and researchers ourselves, we think a great deal about the research process and how to create the conditions necessary for the most rigorous, valid, reliable, respectful, vibrant, authentic, and engaged research possible. We have found in our work that the connective tissue of solid research is the conceptual framework. As guide and ballast, the intentional development of a well-articulated conceptual framework supports your development as a researcher and a scholar. It drives you to articulate your reasons for doing the research you choose to do, and helps you to understand what it means to do that work rigorously. Both are necessary to do exceptional research. Reason without rigor is editorializing; rigor without reason is irrelevant. Ultimately, the usefulness and impact of your research will be determined by what you have to say, how clearly you can say it, the strength of your argument, and the evidence that supports it. The conceptual framework, we argue, is the clearest, most direct way to produce research that rises to these demands.